

STRUCTURE SEARCH

=> d his 175

(FILE 'HCAPLUS' ENTERED AT 16:07:31 ON 02 SEP 2008)

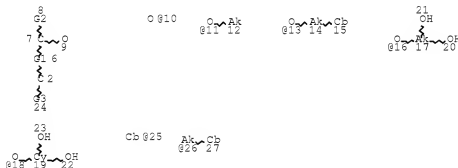
L75 14 S L73 OR L74

=> d que 175

```

L11 14281 SEA FILE=HCAPLUS ABB=ON PLU=ON POLYHYDROXYALKANOAT?
      OR POLYHYDROXYALKANOIC? OR (POLY OR ?POLYM?) (A) (HYDROXY
      ALKANOAT? OR HYDROXYALKANOIC? OR (HYDROXY(W) (ALKANOAT?
      OR ALKANOIC?))) OR PHA
L12   SEL PLU=ON L11 1- RN : 37021 TERMS
L13 37020 SEA FILE=REGISTRY ABB=ON PLU=ON L12
L15   STR

```



```
REP G1=(0-8) C
VAR G2=OH/10/11/13/16/18
VAR G3=H/AK/25/26
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 9
CONNECT IS E1 RC AT 10
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 15
GGCAT IS UNS AT 25
GGCAT IS UNS AT 27
DEFAULT ELEVEL IS LIMITED
ECOUNT IS M1-X12 C AT 12
ECOUNT IS M1-X12 C AT 14
ECOUNT IS M1-X12 C AT 17
```

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 23

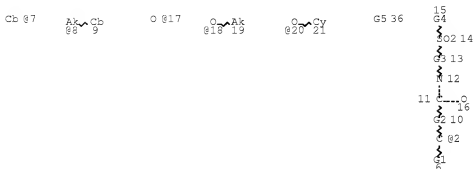
STEREO ATTRIBUTES: NONE

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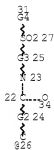
L18      4273 SEA FILE=REGISTRY SUB=L13 SSS FUL L15
L19 (    14281) SEA FILE=HCAPLUS ABB=ON PLU=ON POLYHYDROXYALKANOAT?
          OR POLYHYDROXYALKANOIC? OR (POLY OR ?POLYM?) (A) (HYDROXY
          ALKANOAT? OR HYDROXYALKANOIC? OR (HYDROXY(W) (ALKANOAT?
          OR ALKANOIC?))) OR PHA
L20      SEL PLU=ON L19 1- RN :   37021 TERMS
L21 (    37020) SEA FILE=REGISTRY ABB=ON PLU=ON L20
L22      STR

```

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VAR G1=H/AK/7/8

REP G2=(0-8) C

VAR G3=AK/CY

VAR G4=OH/X/17/18/20

VAR G5=2/26

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 16

CONNECT IS E1 RC AT 17

CONNECT IS E1 RC AT 34

DEFAULT MLEVEL IS ATOM

GGCAT IS UNS AT 7

GGCAT IS UNS AT 9

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

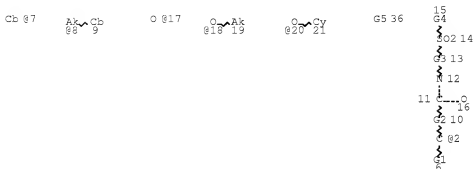
NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

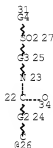
L23 17 SEA FILE=REGISTRY SUB=L21 SSS FUL L22

L24 STR

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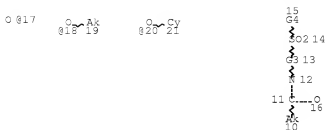
Page 2-A

VAR G1=H/AK/7/8
 REP G2=(0-8) C
 VAR G3=AK/CY
 VAR G4=OH/X/17/18/20
 VAR G5=2/26
 NODE ATTRIBUTES:
 CONNECT IS E1 RC AT 16
 CONNECT IS E1 RC AT 17
 CONNECT IS E1 RC AT 34
 DEFAULT MLEVEL IS ATOM
 GGCAI IS UNS AT 7
 GGCAI IS UNS AT 9
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE
 L25 (214330)SEA FILE=REGISTRY ABB=ON PLU=ON POLYESTER/PCT
 L26 541 SEA FILE=REGISTRY SUB=L25 SSS FUL L24
 L27 2 SEA FILE=REGISTRY ABB=ON PLU=ON L23 AND L18
 L29 STR

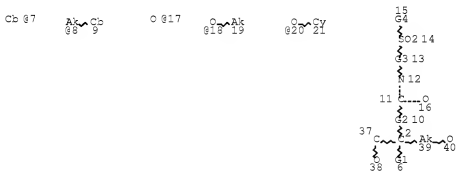
10/579,805-270119-EIC 1700 SEARCH



VAR G3=AK/CY
 VAR G4=OH/X/17/18/20
 NODE ATTRIBUTES:
 CONNECT IS E1 RC AT 16
 CONNECT IS E1 RC AT 17
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED
 ECOUNT IS M1-X9 C AT 10

GRAPH ATTRIBUTES:
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 NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE
 L31 SCR 1796
 L33 STR



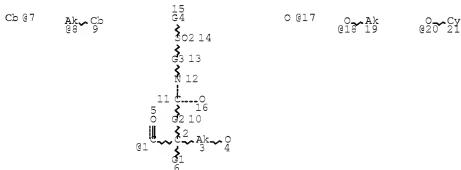
VAR G1=H/AK/7/8
 REP G2=(0-8) C
 VAR G3=AK/CY
 VAR G4=OH/X/17/18/20
 NODE ATTRIBUTES:
 CONNECT IS E1 RC AT 16
 CONNECT IS E1 RC AT 17
 CONNECT IS E1 RC AT 38
 DEFAULT MLEVEL IS ATOM
 GGCAT IS UNS AT 7
 GGCAT IS UNS AT 9
 DEFAULT ECLEVEL IS LIMITED
 ECOUNT IS M1-X4 C AT 39

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE

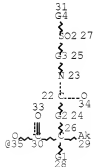
10/579,805-270119-EIC 1700 SEARCH

L36 21198 SEA FILE=REGISTRY SSS FUL L29 AND L31
L38 2257005 SEA FILE=HCAPLUS ABB=ON PLU=ON L18
L40 12650 SEA FILE=HCAPLUS ABB=ON PLU=ON L23
L41 172 SEA FILE=HCAPLUS ABB=ON PLU=ON L26
L42 12810 SEA FILE=HCAPLUS ABB=ON PLU=ON L40 OR L41
L43 8892 SEA FILE=HCAPLUS ABB=ON PLU=ON L42 AND L38
L44 17 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 AND L19
L45 3379 SEA FILE=HCAPLUS ABB=ON PLU=ON L27
L46 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L45 AND L19
L47 23675 SEA FILE=HCAPLUS ABB=ON PLU=ON L36
L48 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L47 AND L19
L50 14 SEA FILE=REGISTRY SUB=L36 SSS FUL L33
L52 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L50
L53 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND L38
L54 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND L19
L55 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L44 OR L46 OR L48 OR
L53 OR L54
L56 QUE ABB=ON PLU=ON POLYHYDROXYALKANOAT? OR POLYHYDROX
YALKANOIC? OR (POLY OR ?POLYM?) (A) (HYDROXYALKANOAT? OR
HYDROXYALKANOIC? OR (HYDROXY (W) (ALKANOAT? OR ALKANOIC?
))) OR PHA
L57 (14281) SEA FILE=HCAPLUS ABB=ON PLU=ON POLYHYDROXYALKANOAT?
OR POLYHYDROXYALKANOIC? OR (POLY OR ?POLYM?) (A) (HYDROXY
ALKANOAT? OR HYDROXYALKANOIC? OR (HYDROXY (W) (ALKANOAT?
OR ALKANOIC?))) OR PHA
L58 SEL PLU=ON L57 1- RN : 37021 TERMS
L59 (37020) SEA FILE=REGISTRY ABB=ON PLU=ON L58
L60 STR



G5 36

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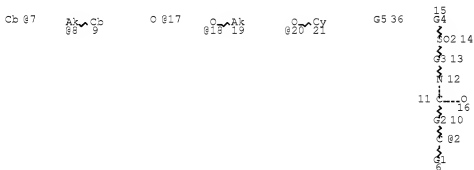
Page 2-A

10/579,805-270119-EIC 1700 SEARCH

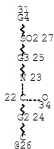
VAR G1=H/AK/7/8
 REP G2=(0-8) C
 VAR G3=AK/CY
 VAR G4=OH/X/17/18/20
 VAR G5=1/35
 NODE ATTRIBUTES:
 CONNECT IS E1 RC AT 5
 CONNECT IS E1 RC AT 16
 CONNECT IS E1 RC AT 17
 CONNECT IS E1 RC AT 33
 CONNECT IS E1 RC AT 34
 DEFAULT MLEVEL IS ATOM
 GGCAT IS UNS AT 7
 GGCAT IS UNS AT 9
 DEFAULT ECLEVEL IS LIMITED
 ECOUNT IS M1-X4 C AT 3
 ECOUNT IS M1-X4 C AT 29

 GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 35

 STEREO ATTRIBUTES: NONE
 L61 STR



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VAR G1=H/AK/7/8
 REP G2=(0-8) C
 VAR G3=AK/CY
 VAR G4=OH/X/17/18/20
 VAR G5=2/26
 NODE ATTRIBUTES:
 CONNECT IS E1 RC AT 16
 CONNECT IS E1 RC AT 17

10/579,805-270119-EIC 1700 SEARCH

CONNECT IS E1 RC AT 34
 DEFAULT MLEVEL IS ATOM
 GGCAT IS UNS AT 7
 GGCAT IS UNS AT 9
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

L62 (17)SEA FILE=REGISTRY SUB=L59 SSS FUL L61
 L63 (12650)SEA FILE=HCAPLUS ABB=ON PLU=ON L62
 L64 (18)SEA FILE=HCAPLUS ABB=ON PLU=ON L56 AND L63
 L65 QUE ABB=ON PLU=ON PY<2005 OR PRY<2005 OR AY<2005 OR
 MY<2005 OR REVIEW/DT
 L66 (14)SEA FILE=HCAPLUS ABB=ON PLU=ON L64 AND L65
 L67 (214330)SEA FILE=REGISTRY ABB=ON PLU=ON POLYESTER/PCT
 L68 (541)SEA FILE=REGISTRY SUB=L67 SSS FUL L61
 L69 (0)SEA FILE=REGISTRY SUB=L68 SSS FUL L60
 L70 (541)SEA FILE=REGISTRY ABB=ON PLU=ON L68 OR L69
 L71 (172)SEA FILE=HCAPLUS ABB=ON PLU=ON L70
 L72 (0)SEA FILE=HCAPLUS ABB=ON PLU=ON L71 AND L56
 L73 14 SEA FILE=HCAPLUS ABB=ON PLU=ON L72 OR L66
 L74 14 SEA FILE=HCAPLUS ABB=ON PLU=ON L55 AND L65
 L75 14 SEA FILE=HCAPLUS ABB=ON PLU=ON L73 OR L74

=> d his 188

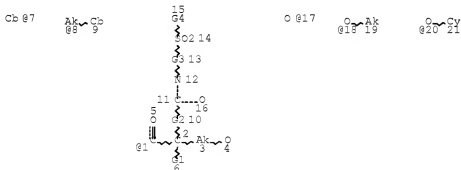
(FILE 'MEDLINE, BIOSIS, DRUGU, EMBASE' ENTERED AT 16:13:22 ON 02
 SEP 2008)

L88 4 SEA L87 OR L84

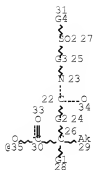
FILE 'STINGUIDE' ENTERED AT 16:13:56 ON 02 SEP 2008

=> d que 188

L76 QUE ABB=ON PLU=ON POLYHYDROXYALKANOAT? OR POLYHYDROX
 YALKANOIC? OR (POLY OR ?POLYM?) (A) (HYDROXYALKANOAT? OR
 HYDROXYALKANOIC? OR (HYDROXY (W) (ALKANOAT? OR ALKANOIC?
))) OR PHA
 L77 SEL PLU=ON L77 1- RN : 37021 TERMS
 L78 STR



G5 36



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VAR G1=H/AK/7/8

REP G2=(0-8) C

VAR G3=AK/CY

VAR G4=OH/X/17/18/20

```
VAR G5=1/35
```

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 5

CONNECT IS E1 RC AT 16

CONNECT IS E1 RC AT 17

CONNECT IS E1 RC AT 33

CONNECT IS E1 RC AT 34

DEFAULT MLEVEL IS ATOM

GGCAT IS UNS AT 7

GGCAT IS UNS AT 9

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS M1-X4 C AT 3

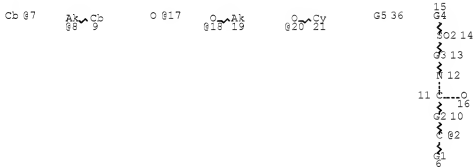
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

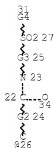
NUMBER OF NODES IS 35

STEREO ATTRIBUTES: NONE

L79 STR



Page 1-A



Page 2-A

VAR G1=H/AK/7/8

REP G2=(0-8) C

VAR G3=AK/CY

VAR G4=OH/X/17/18/20

VAR G5=2/26

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 16

CONNECT IS E1 RC AT 17

CONNECT IS E1 RC AT 34

DEFAULT MLEVEL IS ATOM

GGCAT IS UNS AT 7

GGCAT IS UNS AT 9

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

L80 (17)SEA FILE=REGISTRY SUB=L78 SSS FUL L79

L81 QUE ABB=ON PLU=ON PY<2005 OR PRY<2005 OR AY<2005 OR
MY<2005 OR REVIEW/DT

L82 (24834)SEA L80

L83 (4) SEA L82 AND L76

L84 (4) SEA L83 AND L81

L85 (541)SEA FILE=REGISTRY SUB=L85 SSS FUL L79

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L86 (          0)SEA FILE=REGISTRY SUB=L85 SSS FUL L78

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L87 (0)SEA L87

L88 4 SEA L87 OR L84

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=> dup rem 175 188
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FILE 'HCAPLUS' ENTERED AT 16:15:16 ON 02 SEP 2008

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE 'DRUGU' ENTERED AT 16:15:16 ON 02 SEP 2008

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FILE 'EMBASE' ENTERED AT 16:15:16 ON 02 SEP 2008

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PROCESSING COMPLETED FOR L75

PROCESSING COMPLETED FOR L88

L89 16 DUP REM L75 L88 (2 DUPLICATES REMOVED)

ANSWERS '1-14' FROM FILE HCAPLUS

ANSWER '15' FROM FILE DRUGU

ANSWER '16' FROM FILE EMBASE

STRUCTURE SEARCH RESULTS

=> d 189 1-14 ibib ed abs hitstr hitind

L89 ANSWER 1 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 1996:513343 HCAPLUS Full-text

DOCUMENT NUMBER: 125:211918

ORIGINAL REFERENCE NO.: 125:39347a,39350a

TITLE: The immunomodulatory effects of antibiotics.
In vitro and ex vivo investigations of 21
substances by means of the lymphocyte
transformation test

AUTHOR(S): Schubert, Sabine; Andresen, Bent Holger;
Baehr, Volker; Fischer, Lutz; Stamp, Reinhold;
Stricker, Gundolf; Wittke, Johann Wolfgang;
Ullmann, Uwe

CORPORATE SOURCE: Institut Medizinische Mikrobiologie Virologie,
Universitaet Kiel, Kiel, D-24105, Germany

SOURCE: Zentralblatt fuer Bakteriologie (1996
, 284(2-3), 402-438

CODEN: ZEBAE8; ISSN: 0934-8840

PUBLISHER: Fischer

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 27 Aug 1996

AB The immunomodulatory effects of antibiotics (AB) were studied in vitro and in vivo by applying the lymphocyte (lymph.) transformation test (LTT). The influence of AB on unstimulated and phytohemagglutinin(PHA)-stimulated lymphocyte transformation was investigated. The proliferative response was measured as (3H) thymidine uptake by lymph. For initial screening the LTT was performed on murine lymph. in vitro. Twenty-one antibiotics penicillins, carbapenems (I), cephalosporins (II), nitroimidazoles, quinolones, aminoglycosides, tetracyclines, and purine analogs (III) were tested with 11 different concentration, resp. AB with a distinct influence on murine cells in vitro were applied to human lymph. At therapeutic concentration a pronounced stimulation of murine lymph. transformation was caused by I, aminothiazole II, and imidazoles, whereas III had only suppressive effect. However, the increased (3H) thymidine uptake was not regularly reproduced in human lymph. and in ex vivo expts.

IT 66148-78-5, Temocillin 69712-56-7, Cefotetan
69739-16-8, Cefodizime 72556-82-8, Ceftazidime
78119-38-0, Aztreonam

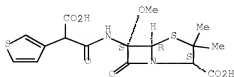
RL: BAC (Biological activity or effector, except adverse); BSU
(Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)

(immunomodulatory effects of antibiotics determined by lymphocyte
transformation test)

RN 66148-78-5 HCAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,
6-[[[2-carboxy-2-(3-thienyl)acetyl]amino]-6-methoxy-3,3-dimethyl-7-
oxo-, (2S,5R,6S)- (CA INDEX NAME)

Absolute stereochemistry.

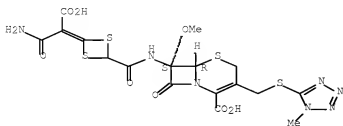


RN 69712-56-7 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,
7-[[[4-(2-amino-1-carboxy-2-oxoethylidene)-1,3-dithietan-2-
yl]carbonyl]amino]-7-methoxy-3-[[[1-methyl-1H-tetrazol-5-

yl)thio)methyl]-8-oxo-, (6R,7S)- (CA INDEX NAME)

Absolute stereochemistry.

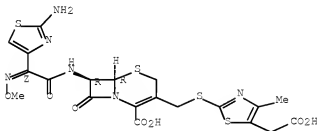


RN 69739-16-8 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,
7-[[[(2Z)-2-(2-amino-4-thiazolyl)-2-(methoxyimino)acetyl]amino]-3-
[[[5-(carboxymethyl)-4-methyl-2-thiazolyl]thio)methyl]-8-oxo-,
(6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

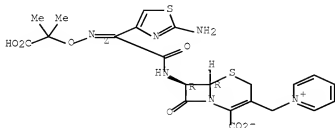


RN 72558-82-8 HCAPLUS

CN Pyridinium, 1-[[[(6R,7R)-7-[[[(2Z)-2-(2-amino-4-thiazolyl)-2-[(1-
carboxy-1-methylethoxy)imino]acetyl]amino]-2-carboxy-8-oxo-5-thia-
1-azabicyclo[4.2.0]oct-2-en-3-yl)methyl]-, inner salt (CA INDEX
NAME)

Absolute stereochemistry.

Double bond geometry as shown.



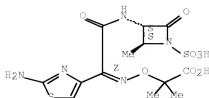
RN 78110-38-0 HCAPLUS

CN Propanoic acid, 2-[[[(Z)-[1-(2-amino-4-thiazolyl)-2-[[[(2S,3S)-2-
methyl-4-oxo-1-sulfo-3-azetidinyl]amino]-2-

oxoethylidene]amino]oxy]-2-methyl- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



CC 1-5 (Pharmacology)

IT 60-54-8, Tetracycline 443-48-1, Metronidazole 30516-87-1,
 Zidovudine 56391-56-1, Netilmicin 58001-44-8, Clavulanic acid
 59277-89-3, Acyclovir 64221-86-9, Imipenem 65085-01-0,
 Cefmenoxime 66148-78-5, Temocillin 69712-56-7,
 Cefotetan 69739-16-8, Cefodizime 70458-96-7,
 Norfloxacin 72558-82-8, Ceftazidime 73384-59-5,
 Ceftriaxone 74011-58-8, Enoxacin 78110-38-0, Aztreonam
 82410-32-0, Ganciclovir 82419-36-1, Ofloxacin 85721-33-1,
 Ciprofloxacin 92047-76-2, TCDO 95415-91-1, Sch 34343

RI: BAC (Biological activity or effector, except adverse); BSU

(Biological study, unclassified); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(Immunomodulatory effects of antibiotics determined by lymphocyte transformation test)

L89 ANSWER 2 OF 16 HCAPLUS COPYRIGHT 2008 ACS ON STN DUPLICATE 2

ACCESSION NUMBER: 1992:631944 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 117:231944

ORIGINAL REFERENCE NO.: 117:40093a,40096a

TITLE: Effect of stilbene-type anion channel blockers
 on the immune response during experimental
 allergic neuritis (EAN)

AUTHOR(S): Mix, Eilhard; Correale, J.; Olsson, T.;
 Solders, G.; Link, H.

CORPORATE SOURCE: Karolinska Inst., Huddinge Univ. Hosp.,
 Stockholm, Swed.

SOURCE: Immunopharmacology and Immunotoxicology (
 1992), 14(3), 579-609

CODEN: IIIOEF; ISSN: 0892-3973

DOCUMENT TYPE: Journal

LANGUAGE: English

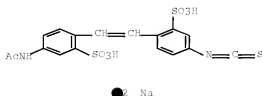
ED Entered STN: 13 Dec 1992

AB The authors have studied the role of anion channel gating for the autoimmune response in exptl. allergic neuritis (EAN) induced by bovine peripheral myelin (BPM). The influence of the stilbene-type anion channel blockers SITS and DIDS on T cell function was assessed by measurement of proliferation and by counting of interferon- γ (IFN- γ) secreting cells (IFN- γ -s.c.) in response to BPM and phytohemagglutinin (PHA). SITS caused a dose-dependent increase of spontaneous proliferative activity as well as of proliferation in response to the antigenic stimulus BPM. In contrast, the drug caused a decrease of proliferation of cells stimulated with PHA. The number of cells induced to IFN- γ secretion was reduced by SITS. The suppressive effect was dependent on the degree of activity of cells without drugs. Cultures showing high nos. of BPM-reactive T cells were more easily suppressed than cultures with low nos. of BPM-reactive T cells. The results suggest that anion channel gating is involved in the triggering of T cells to IFN- γ secretion. The anion channel signal pathway in lymphocytes could be a target for pharmacol. intervention in inflammatory disorders. In the presently used autoimmune model, EAN, the net effect of in vivo treatment with SITS resulted in worsening of clin. signs and increased inflammatory cell infiltration in sciatic nerve,

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whereas the in vitro conductivity of sciatic nerve was not significantly affected by the drug. Thus anion channel gating seems to regulate activities of immune cells, and drugs with anion channel blocking properties may have effects that enhance autoimmune disease.

IT 51023-76-8, SITS
 RL: BIOL (Biological study)
 (T-cell function response to, in exptl. allergic neuritis)
 RN 51023-76-8 HCAPLUS
 CN Benzenesulfonic acid, 5-(acetyl amino)-2-[2-(4-isothiocyanato-2-sulphophenyl)ethenyl]-, sodium salt (1:2) (CA INDEX NAME)



CC 15-8 (Immunochemistry)
 Section cross-reference(s): 2
 IT 51023-76-8, SITS 53005-05-3, DIDS
 RL: BIOL (Biological study)
 (T-cell function response to, in exptl. allergic neuritis)

L89 ANSWER 3 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2006:657311 HCAPLUS Full-text
 DOCUMENT NUMBER: 145:126120
 TITLE: Polymers containing poly(hydroxyalkanoates) and agents for use with medical articles and methods of fabricating the same
 INVENTOR(S): Hossainy, Syed F. A.; Pacetti, Stephen D.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 35 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060147412	A1	20060706	US 2004-27955	2004 1230
WO 2006073631	A1	20060713	WO 2005-US43527	2005 1201

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI,

10/579,805-270119-EIC 1700 SEARCH

SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR,
NE, SH, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL,
SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
EP 1846476 A1 20071024 EP 2005-852689

2005
1201

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HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE,
SI, SK, TR
JP 2008527074 T 20080724 JP 2007-549388

2005
1201

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PRIORITY APPLN. INFO.: US 2004-27955 A 2004
1230

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WO 2005-US43527 W 2005
1201

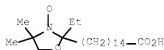
ED Entered STN: 07 Jul 2006

AB Polymers containing poly(hydroxyalkanoates) and agents for use with medical articles and methods of fabricating the same are disclosed. The medical article generally comprises an implantable substrate having a coating, and the coating contains a poly(hydroxyalkanoate).

IT 53034-38-1
RL: MOA (Modifier or additive use); USES (Uses)
(free radical scavenger; polymers containing poly(hydroxyalkanoates) and agents for use with medical articles and methods of fabricating the same)

RN 53034-38-1 HCAPLUS

CN 3-Oxazolidinyloxy, 2-(14-carboxytetradecyl)-2-ethyl-4,4-dimethyl-
(CA INDEX NAME)



IT 9004-32-4, Carboxymethylcellulose 33069-62-4,
Paclitaxel 38599-26-7 99896-85-2
114977-28-5, Docetaxel

RL: MOA (Modifier or additive use); USES (Uses)
(polymers containing poly(hydroxyalkanoates)
and agents for use with medical articles and methods of
fabricating the same)

RN 9004-32-4 HCAPLUS

CN Cellulose, carboxymethyl ether, sodium salt (CA INDEX NAME)

CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-14-1

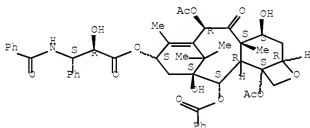
CMF C2 H4 O3



RN 33069-62-4 HCAPLUS

CN Benzenepropanoic acid, β -(benzoylamino)- α -hydroxy-,
(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-
(benzyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-
dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-
cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (α R, β S)- (CA
INDEX NAME)

Absolute stereochemistry. Rotation (-).



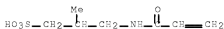
RN 38599-26-7 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-3-[(1-oxo-2-propen-1-yl)amino]-,
homopolymer (CA INDEX NAME)

CM 1

CRN 45099-91-0

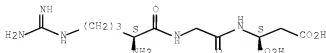
CMF C7 H13 N O4 S



RN 99896-85-2 HCAPLUS

CN L-Aspartic acid, L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



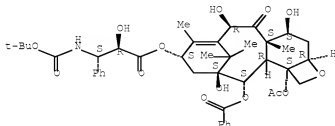
RN 114977-28-5 HCAPLUS

CN Benzenepropanoic acid, β -[[(1,1-dimethylethoxy)carbonyl]amino]
]- α -hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-12b-

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(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,6,11-trihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester,
(αR,βS)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



INCL 424078270; 424078300; 525054100
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 63
ST medical coating polyhydroxyalkanoate
IT Medical goods
(coating; polymers containing poly(hydroxyalkanoates) and agents for use with medical articles and methods of fabricating the same)
IT Silk
(elastins; polymers containing poly(hydroxyalkanoates) and agents for use with medical articles and methods of fabricating the same)
IT Fats and Glyceridic oils, uses
RL: MOA (Modifier or additive use); USES (Uses)
(fish; polymers containing poly(hydroxyalkanoates) and agents for use with medical articles and methods of fabricating the same)
IT Essential oils
RL: MOA (Modifier or additive use); USES (Uses)
(garlic; polymers containing poly(hydroxyalkanoates) and agents for use with medical articles and methods of fabricating the same)
IT Polyesters, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydroxycarboxylic acid-based; polymers containing poly(hydroxyalkanoates) and agents for use with medical articles and methods of fabricating the same)
IT Polyesters, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polyamide-; polymers containing poly(hydroxyalkanoates) and agents for use with medical articles and methods of fabricating the same)
IT Polyamides, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polyester-; polymers containing poly(hydroxyalkanoates) and agents for use with medical articles and methods of fabricating the same)
IT Anticoagulants
Antimicrobial agents
Radical scavengers
(polymers containing poly(hydroxyalkanoates) and agents for use with medical articles and methods of fabricating the same)

IT Castor oil
Collagens, uses
Elastins
Essential oils
Peptides, uses
Polyoxyalkylenes, uses
Polysaccharides, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polymers containing poly(hydroxyalkanoates)
and agents for use with medical articles and methods of
fabricating the same)

IT Polymer blends
RL: TEM (Technical or engineered material use); THU (Therapeutic
use); BIOL (Biological study); USES (Uses)
(polymers containing poly(hydroxyalkanoates)
and agents for use with medical articles and methods of
fabricating the same)

IT Medical goods
(stents; polymers containing poly(
hydroxyalkanoates) and agents for use with medical
articles and methods of fabricating the same)

IT 2226-96-2 2564-83-2 14691-88-4 53054-38-1
897030-64-7
RL: MOA (Modifier or additive use); USES (Uses)
(free radical scavenger; polymers containing poly(
hydroxyalkanoates) and agents for use with medical
articles and methods of fabricating the same)

IT 50-28-2, Estradiol, uses 56-81-5, Glycerol, uses 64-17-5,
Ethanol, uses 68-12-2, Dimethyl formamide, uses 107-73-3,
Phosphorylcholine 1330-20-7, Xylene, uses 8001-27-2, Hirudin
9003-39-8, Poly(N-vinylpyrrolidone) 9004-32-4,
Carboxymethylcellulose 9004-54-0D, Dextran, sulfated
9004-54-0D, Dextran, sulfonated 9004-61-9, Hyaluronic acid
9005-49-6, Heparin, uses 9007-28-7, Chondroitin sulfate
24967-94-0, Dermatan sulfate 25122-41-2, Clobetasol
25322-68-3, Poly(ethylene oxide) 25322-69-4, Poly(propylene
glycol) 53069-62-4, Paclitaxel 38599-26-7
50851-57-5 53123-88-9, Rapamycin 85637-73-6, Atrial
natriuretic peptide 99896-85-2 104987-11-3, Tacrolimus
114977-28-5, Docetaxel 116057-75-1, Idoxifene
118292-40-3, Tazarotene 159351-69-6, Everolimus 221877-54-9,
ABT-578
RL: MOA (Modifier or additive use); USES (Uses)
(polymers containing poly(hydroxyalkanoates)
and agents for use with medical articles and methods of
fabricating the same)

L89 ANSWER 4 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:147375 HCAPLUS Full-text
DOCUMENT NUMBER: 144:219378
TITLE: Coatings for implantable devices comprising
poly(hydroxy-
alkanoates) and diacid linkages
INVENTOR(S): Pacetti, Stephen D.; Glauser, Thierry
PATENT ASSIGNEE(S): Advanced Cardiovascular Systems, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060034888	A1	20060216	US 2004-902982	2004

0730

WO 2006055049 A1 20060526 WO 2005-US24314 2005
0707

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AH, AZ, BY, KG, KZ, MD, RU, TJ, TM
EP 1778764 A1 20070502 EP 2005-851202

2005
0707

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
JP 2008508395 T 20080321 JP 2007-523593

2005
0707

PRIORITY APPLN. INFO.: US 2004-902982 A 2004
0730
WO 2005-US24314 W 2005
0707

ED Entered STN: 16 Feb 2006

AB Coatings for an implantable medical device and a method of fabricating thereof are disclosed, the coatings including block-polymers comprising at least one poly(hydroxyacid) or poly(hydroxy-alkanoate) block, at least one block of a biol. compatible polymer and at least one type of linking moiety. For example, to a 250 mL, three necked flask, equipped with magnetic stirring, vacuum, and argon purge was added PEG300 37.5 gm. Using an oil bath, the PEG was heated to 1050 C., and stirred under vacuum for two hours to remove water. The flask was purged with argon, and D,L-lactide 76.94 g was added, and vacuum applied with stirring for another 30 min. After purging with argon, the flask was heated to 1400 C., and polymerization was initiated by adding 10.8 mL of a 5 % (weight/weight) stannous-octanoate-dry-toluene solution. After stirring for 24 h, the reaction solution was cooled and poured into 500 mL of cold methanol to precipitate the polymer. The polymer was washed with methanol/petroleum ether and dried under vacuum. The triblock copolymer from above 25 g and succinic anhydride 0.0417 g was dissolved in 200 mL of anhydrous dichloromethane. To this is added 1,3-dicyclohexylcarbodiimide 0.103 g and 4-dimethylaminopyridine 0.0012 g. After stirring at room temperature for 24 h, the reaction solution was centrifuged to precipitate dicyclohexylurea and the supernatant solution poured into 150 mL of cold methanol to precipitate the polymer. After filtration, the polymer was washed with methanol/petroleum ether and dried under vacuum.

IT 110-16-7, Maleic acid, biological studies 110-17-8
Fumaric acid, biological studies 110-94-1, Glutaric acid 111-16-0, Pimelic acid 111-20-6, Sebacic acid, biological studies 123-99-3, Azelaic acid, biological studies 124-04-9, Adipic acid, biological studies 141-82-2, Malonic acid, biological studies 595-48-6, Suberic acid 505-52-2, Brassylic acid 505-54-3, Thapsic acid 543-05-2, 1,3-Acetonedicarboxylic acid 593-23-2, Decane-1,10-dicarboxylic acid 821-38-5,

10/579,805-270119-EIC 1700 SEARCH

Dodecane-1,12-dicarboxylic acid 1469-18-6,
 Tridecane-1,13-dicarboxylic acid 1852-04-6,
 Nonane-1,9-dicarboxylic acid 25249-16-5,
 Poly(2-hydroxyethyl methacrylate) 26963-09-3,
 Poly(3-hydroxybutyrate) 26100-51-6, Poly(lactic acid)
 26811-96-1, Poly(L-lactic acid) 27119-97-9
 33594-93-3, Poly(3-hydroxypropylmethacrylate)
 87120-66-5 114959-05-6, Poly(4-hydroxybutyrate)
 136840-86-3 143073-46-5 681431-92-5
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (coatings for implantable devices comprising poly (hydroxy-alkanoates) and diacid linkages)

RN 110-16-7 HCAPLUS

CN 2-Butenedioic acid (2Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 110-17-8 HCAPLUS

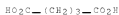
CN 2-Butenedioic acid (2E)- (CA INDEX NAME)

Double bond geometry as shown.



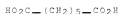
RN 110-94-1 HCAPLUS

CN Pentanedioic acid (CA INDEX NAME)



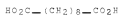
RN 111-16-0 HCAPLUS

CN Heptanedioic acid (CA INDEX NAME)



RN 111-20-6 HCAPLUS

CN Decanedioic acid (CA INDEX NAME)



RN 123-99-9 HCAPLUS

CN Nonanedioic acid (CA INDEX NAME)

10/579,805-270119-EIC 1700 SEARCH



RN 124-04-9 HCAPLUS
CN Hexanedioic acid (CA INDEX NAME)



RN 141-82-2 HCAPLUS
CN Propanedioic acid (CA INDEX NAME)



RN 505-48-6 HCAPLUS
CN Octanedioic acid (CA INDEX NAME)



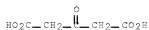
RN 505-52-2 HCAPLUS
CN Tridecanedioic acid (CA INDEX NAME)



RN 505-54-4 HCAPLUS
CN Hexadecanedioic acid (CA INDEX NAME)

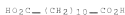


RN 542-05-2 HCAPLUS
CN Pentanedioic acid, 3-oxo- (CA INDEX NAME)



RN 693-23-2 HCAPLUS
CN Dodecanedioic acid (CA INDEX NAME)

10/579,805-270119-EIC 1700 SEARCH



RN 821-38-5 HCAPLUS
 CN Tetradecanedioic acid (CA INDEX NAME)



RN 1460-18-0 HCAPLUS
 CN Pentadecanedioic acid (CA INDEX NAME)



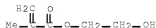
RN 1852-04-6 HCAPLUS
 CN Undecanedioic acid (CA INDEX NAME)



RN 25249-16-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, homopolymer
 (CA INDEX NAME)

CM 1

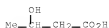
CRN 868-77-9
 CMF C6 H10 O3



RN 26063-00-3 HCAPLUS
 CN Butanoic acid, 3-hydroxy-, homopolymer (CA INDEX NAME)

CM 1

CRN 300-85-6
 CMF C4 H8 O3



RN 26100-51-6 HCAPLUS
 CN Propanoic acid, 2-hydroxy-, homopolymer (CA INDEX NAME)

CM 1

CRN 50-21-5

CMF C3 H6 O3



RN 26811-96-1 HCAPLUS

CN Propanoic acid, 2-hydroxy-, (2S)-, homopolymer (CA INDEX NAME)

CM 1

CRN 79-33-4

CMF C3 H6 O3

Absolute stereochemistry. Rotation (+).



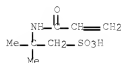
RN 27119-07-9 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-, homopolymer (CA INDEX NAME)

CM 1

CRN 15214-89-8

CMF C7 H13 N O4 S



RN 33594-93-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-hydroxypropyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 2761-09-3

CMF C7 H12 O3

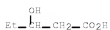


10/579,805-270119-EIC 1700 SEARCH

RN 83120-66-5 HCAPLUS
CN Pentanoic acid, 3-hydroxy-, homopolymer (CA INDEX NAME)

CM 1

CRN 10237-77-1
CMF C5 H10 O3



RN 114959-05-6 HCAPLUS
CN Butanoic acid, 4-hydroxy-, homopolymer (CA INDEX NAME)

CM 1

CRN 591-81-1
CMF C4 H8 O3



RN 136840-86-3 HCAPLUS
CN Hyaluronic acid, hexadecanoate (9CI) (CA INDEX NAME)

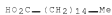
CM 1

CRN 9004-61-9
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-10-3
CMF C16 H32 O2



RN 143073-46-5 HCAPLUS
CN L-Lysine, polymer with oxirane, graft (CA INDEX NAME)

CM 1

CRN 75-21-8
CMF C2 H4 O

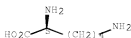


CM 2

CRN 56-87-1

CMF C6 H14 N2 O2

Absolute stereochemistry.



RN 681431-92-5 HCAPLUS

CN Hyaluronic acid, octadecanoate (ester) (9CI) (CA INDEX NAME)

CM 1

CRN 9004-61-9

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-11-4

CMF C18 H36 O2



INCL 424426000; 525054100; 525054200

CC 63-7 (Pharmaceuticals)

ST polyhydroxyalkanoate stent coating implant

IT Acid halides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (chlorides, diacid; coatings for implantable devices comprising
 poly (hydroxy-alkanoates) and
 diacid linkages)

IT Coating materials

(coatings for implantable devices comprising poly (
 hydroxy-alkanoates) and diacid linkages)

IT Anhydrides

Polyoxyalkylenes, biological studies

Polyphosphazenes

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (coatings for implantable devices comprising poly (
 hydroxy-alkanoates) and diacid linkages)

IT Carboxylic acids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (dicarboxylic; coatings for implantable devices comprising
 poly (hydroxy-alkanoates) and
 diacid linkages)

IT Polyesters, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (hydroxycarboxylic acid-based; coatings for implantable devices
 comprising poly (hydroxy-alkanoates
) and diacid linkages)

IT Prosthetic materials and Prosthetics

(implants; coatings for implantable devices comprising
 poly (hydroxy-alkanoates) and

diacid linkages)

IT Polyethers, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (ortho ester group-containing; coatings for implantable devices
 comprising poly (hydroxy-alkanoates
) and diacid linkages)

IT Medical goods
 (stents; coatings for implantable devices comprising
 poly (hydroxy-alkanoates) and
 diacid linkages)

IT 100-21-0, Terephthalic acid, biological studies 110-16-7
 , Maleic acid, biological studies 110-17-8, Fumaric
 acid, biological studies 110-94-1, Glutaric acid
 111-16-0, Pimelic acid 111-20-6, Sebacic acid,
 biological studies 123-99-9, Azelaic acid, biological
 studies 124-04-9, Adipic acid, biological studies
 141-62-2, Malonic acid, biological studies 144-62-7,
 Oxalic acid, biological studies 502-44-3D, ε-
 Caprolactone, polymer 502-97-6D, Glycolide, polymer
 505-48-6, Suberic acid 505-52-2, Brassylic acid
 505-54-4, Thapsic acid 542-05-2,
 1,3-Acetonedicarboxylic acid 693-23-2,
 Decane-1,10-dicarboxylic acid 821-38-5,
 Dodecane-1,12-dicarboxylic acid 1460-18-0,
 Tridecane-1,13-dicarboxylic acid 1852-04-6,
 Nonane-1,9-dicarboxylic acid 9003-11-6, Ethyleneoxide-propylene
 oxide copolymer 9003-39-8, Poly(N-vinylpyrrolidone)
 9004-61-9D, Hyaluronic acid, polymers 9005-49-6D, Heparin,
 polymers 9042-14-2, Dextran sulfate 24980-41-4,
 Poly(caprolactone) 25038-75-9, Poly(D-lactide) 25190-06-1,
 Poly(tetramethylene glycol) 25248-42-4, Poly(caprolactone)
 25249-16-5, Poly(2-hydroxyethyl methacrylate)
 25322-68-3, Poly(ethylene glycol) 25322-69-4, Poly(propylene
 glycol) 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)]
 26063-09-3, Poly(3-hydroxybutyrate) 26100-51-6,
 Poly(lactic acid) 26161-42-2 26680-10-4, Poly(lactide)
 26744-04-7 26780-50-7, Glycolide-lactide copolymer
 26811-96-1, Poly(L-lactic acid) 26917-25-9
 27119-67-9 28728-97-4, Poly[oxy(1-oxo-1,4-butanediyl)]
 30846-39-0, Glycolide-L-lactide copolymer 33135-50-1,
 Poly(L-lactide) 33594-93-3, Poly(3-
 hydroxypropylmethacrylate) 41706-81-4 50851-57-5 65408-67-5
 67291-18-3, Poly[oxy(1-ethyl-3-oxo-1,3-propanediyl)] 70524-20-8
 75734-93-9 83120-66-5 113883-70-8 114959-05-6
 , Poly(4-hydroxybutyrate) 129515-24-8 136840-86-3
 143073-46-5 206859-47-4 302597-29-1
 681431-92-5 710952-30-0
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (coatings for implantable devices comprising poly (hydroxy-alkanoates) and diacid linkages)

L89 ANSWER 5 OF 16 HCAPLUS COPYRIGHT 2008 ACS ON STN
 ACCESSION NUMBER: 2006:125423 HCAPLUS Full-text
 DOCUMENT NUMBER: 144:213906
 TITLE: Polymer layers for use in toner carrier and
 developing apparatus using it
 INVENTOR(S): Yano, Tetsuya; Kenmoku, Takashi; Fukui,
 Itsuki; Kusakari, Aki; Mihara, Chieko;
 Fujimoto, Norikazu
 PATENT ASSIGNEE(S): Canon Inc., Japan
 SOURCE: Jpn. Kokai Tokyo Koho, 134 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

10/579,805-270119-EIC 1700 SEARCH

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006037094	A	20060209	JP 2005-185636	2005 0624
			<--	
US 20060194071	A1	20060831	US 2005-165356	2005 0624
			<--	
PRIORITY APPLN. INFO.:			JP 2004-188893	A 2004 0625
			<--	

ED Entered STN: 10 Feb 2006

AB The toner carrier of electrophotog. copier or printer, etc., is made from polyhydroxyalkanoates containing units derived from sulfonic acid or its derivs. or carboxylic acid or its derivs. for controlling the excess elec. charge of toner and preventing toner melt stick on carrier surface.

IT 26063-00-3P, 3-Hydroxybutyric acid homopolymer
172923-04-5P, 3-Hydroxy-5-phenylvaleric acid homopolymer
347867-66-7P
RL: BMF (Bioindustrial manufacture); RCT (Reactant); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (assumed monomers; polymer layers for use in toner carrier of reproduction apparatus)

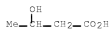
RN 26063-00-3 HCAPLUS

CN Butanoic acid, 3-hydroxy-, homopolymer (CA INDEX NAME)

CM 1

CRN 300-85-6

CMF C4 H8 O3



RN 172923-04-5 HCAPLUS

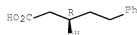
CN Benzenepentanoic acid, β -hydroxy-, (BR)-, homopolymer, isotactic (9CI) (CA INDEX NAME)

CM 1

CRN 153744-07-1

CMF C11 H14 O3

Absolute stereochemistry.



RN 347867-66-7 HCAPLUS

CN Pentanoic acid, 3-hydroxy-5-phenoxy-, homopolymer (9CI) (CA INDEX NAME)

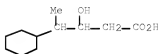
CM 1

10/579,805-270119-EIC 1700 SEARCH

CRN 155638-20-3
CMF C11 H14 O4



IT 875814-41-8DE, carboxylation product, reaction products
with sulfonic acid group-containing amines, esterified
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
or engineered material use); PREP (Preparation); USES (Uses)
(assumed monomers; polymer layers for use in toner carrier of
reproduction apparatus)
RN 875814-41-8 HCAPLUS
CN Cyclohexanecarboxylic acid, β -hydroxy- γ -methyl-,
homopolymer (9CI) (CA INDEX NAME)
CM 1
CRN 875814-40-7
CMF C11 H20 O3



IT 9011-14-7, PMMA 9017-49-6, Dimethylaminoethyl
methacrylate-divinylbenzene-styrene copolymer
RL: MOA (Modifier or additive use); USES (Uses)
(carbon black-coated elec. conductive fillers; polymer layers
for use in toner carrier of reproduction apparatus)
RN 9011-14-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, homopolymer (CA INDEX
NAME)
CM 1
CRN 80-62-6
CMF C5 H8 O2



RN 9017-49-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer
with diethenylbenzene and ethenylbenzene (CA INDEX NAME)
CM 1
CRN 2867-47-2
CMF C8 H15 N O2

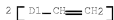


CM 2

CRM 1321-74-0

CMF C10 H10

CCI IDS



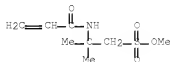
CM 3

CRM 100-42-5

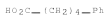
CMF C8 H8



- IT 54545-52-7, Methyl 2-acrylamido-2-methylpropanesulfonate
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (methylation agent; polymer layers for use in toner carrier of
 reproduction apparatus)
- RN 54545-52-7 HCAPLUS
- CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-,
 methyl ester (9CI) (CA INDEX NAME)



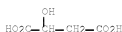
- IT 2270-20-4, 5-Phenylvaleric acid 7170-40-2,
 5-Phenoxyvaleric acid 58214-38-3, Monosodium malate
 874527-88-5
 RL: BCP (Biochemical process); BIOL (Biological study); PROC
 (Process)
 (polymer layers for use in toner carrier of reproduction apparatus)
- RN 2270-20-4 HCAPLUS
- CN Benzenepentanoic acid (CA INDEX NAME)



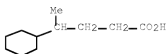
RN 7170-40-3 HCAPLUS
 CN Pentanoic acid, 5-phenoxy- (CA INDEX NAME)



RN 58214-38-3 HCAPLUS
 CN Butanedioic acid, 2-hydroxy-, sodium salt (1:1) (CA INDEX NAME)



RN 874527-88-5 HCAPLUS
 CN Cyclohexanebutanoic acid, γ -methyl- (CA INDEX NAME)



IT 5437-45-5DP, Benzyl bromoacetate, carboxylation compound with polyhydroxyalkanoates, reaction products with sulfonic acid group-containing amines, esterified 14660-52-7DP, Ethyl 5-bromovalerate, carboxylation compound with polyhydroxyalkanoates, reaction products with sulfonic acid group-containing amines, esterified 26063-00-3DP, 3-Hydroxybutyric acid homopolymer, carboxylation product, reaction products with sulfonic acid group-containing amines, esterified 29823-21-0DP, Ethyl 8-bromooctanoate, carboxylation compound with polyhydroxyalkanoates, reaction products with sulfonic acid group-containing amines, esterified 172923-04-5DP, 3-Hydroxy-5-phenylvaleric acid homopolymer, carboxylation product, reaction products with sulfonic acid group-containing amines, esterified 347867-66-7DP, carboxylation product, reaction products with sulfonic acid group-containing amines, esterified 275901-95-7DP, debenzylated, reaction products with sulfonic acid group-containing amines
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (polymer layers for use in toner carrier of reproduction apparatus)

RN 5437-45-6 HCAPLUS
 CN Acetic acid, 2-bromo-, phenylmethyl ester (CA INDEX NAME)



RN 14660-52-7 HCAPLUS
 CN Pentanoic acid, 5-bromo-, ethyl ester (CA INDEX NAME)



RN 26063-00-3 HCAPLUS
 CN Butanoic acid, 3-hydroxy-, homopolymer (CA INDEX NAME)

CM 1

CRN 300-85-6
 CMF C4 H8 O3



RN 29823-21-0 HCAPLUS
 CN Octanoic acid, 8-bromo-, ethyl ester (CA INDEX NAME)

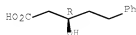


RN 172923-04-5 HCAPLUS
 CN Benzenepentanoic acid, β -hydroxy-, (β R)-, homopolymer, isotactic (9CI) (CA INDEX NAME)

CM 1

CRN 153744-07-1
 CMF C11 H14 O3

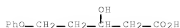
Absolute stereochemistry.



RN 347867-66-7 HCAPLUS
 CN Pentanoic acid, 3-hydroxy-5-phenoxy-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 155638-20-3
CMF C11 H14 O4

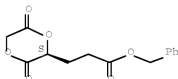


RN 875902-95-7 HCAPLUS
CN 1,4-Dioxane-2-propanoic acid, 3,6-dioxo-, phenylmethyl ester,
(2S)-, polymer with 3,6-bis(phenylmethyl)-1,4-dioxane-2,5-dione
(9CI) (CA INDEX NAME)

CM 1

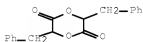
CRN 872139-38-3
CMF C14 H14 O6

Absolute stereochemistry.



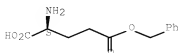
CM 2

CRN 136532-18-8
CMF C18 H16 O4



IT 1676-73-9P, L-Glutamic acid γ -benzyl ester
156693-50-4P 872139-37-2P 872139-38-3P
875902-95-7P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP
(Preparation); RACT (Reactant or reagent)
(polymer layers for use in toner carrier of reproduction apparatus)
RN 1676-73-9 HCAPLUS
CN L-Glutamic acid, 5-(phenylmethyl) ester (CA INDEX NAME)

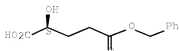
Absolute stereochemistry. Rotation (+).



10/579,805-270119-EIC 1700 SEARCH

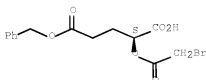
RN 156693-50-4 HCAPLUS
 CN Pentanedioic acid, 2-hydroxy-, 5-(phenylmethyl) ester, (2S)- (CA INDEX NAME)

Absolute stereochemistry.



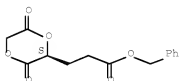
RN 872139-37-2 HCAPLUS
 CN Pentanedioic acid, 2-[(2-bromoacetyl)oxy]-, 5-(phenylmethyl) ester, (2S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 872139-38-3 HCAPLUS
 CN 1,4-Dioxane-2-propanoic acid, 3,6-dioxo-, phenylmethyl ester, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

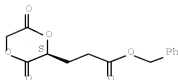


RN 875902-95-7 HCAPLUS
 CN 1,4-Dioxane-2-propanoic acid, 3,6-dioxo-, phenylmethyl ester, (2S)-, polymer with 3,6-bis(phenylmethyl)-1,4-dioxane-2,5-dione (9CI) (CA INDEX NAME)

CM 1

CRN 872139-38-3
 CMF C14 H14 O6

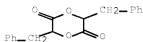
Absolute stereochemistry.



CM 2

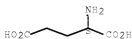
CRM 136532-18-8

CMF C18 H16 O4



IT 56-86-0, L-Glutamic acid, reactions 25542-62-5D,
 Ethyl 6-bromohexanoate, carboxylation compound with
 polyhydroxyalkanoates, reaction products with sulfonic
 acid group-containing amines, esterified 872413-66-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (polymer layers for use in toner carrier of reproduction apparatus)
 RN 56-86-0 HCAPLUS
 CN L-Glutamic acid (CA INDEX NAME)

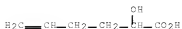
Absolute stereochemistry.



RN 25542-62-5 HCAPLUS
 CN Hexanoic acid, 6-bromo-, ethyl ester (CA INDEX NAME)



RN 872413-66-6 HCAPLUS
 CN 5-Hexenoic acid, 2-hydroxy- (CA INDEX NAME)



CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 74

- ST hydroxyalkanoic acid copolymer amide sulfonic acid ester toner carrier; electrophotog toner carrier sulfonic acid functional polyhydroxyalkanoate
- IT 26063-00-3P, 3-Hydroxybutyric acid homopolymer
172923-04-5P, 3-Hydroxy-5-phenylvaleric acid homopolymer
347867-66-7P
RL: BMF (Bioindustrial manufacture); RCT (Reactant); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (assumed monomers; polymer layers for use in toner carrier of reproduction apparatus)
- IT 875814-41-8DP, carboxylation product, reaction products with sulfonic acid group-containing amines, esterified
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (assumed monomers; polymer layers for use in toner carrier of reproduction apparatus)
- IT 9011-14-7, PMMA 9017-49-6, Dimethylaminoethyl methacrylate-divinylbenzene-styrene copolymer
RL: MOA (Modifier or additive use); USES (Uses) (carbon black-coated elec. conductive fillers; polymer layers for use in toner carrier of reproduction apparatus)
- IT 18107-18-1, Trimethylsilyl diazomethane 54545-52-7, Methyl 2-acrylamido-2-methylpropanesulfonate
RL: RCT (Reactant); RACT (Reactant or reagent) (methylation agent; polymer layers for use in toner carrier of reproduction apparatus)
- IT 2270-20-4, 5-Phenylvaleric acid 7170-40-3, 5-Phenoxyvaleric acid 58214-38-3, Monosodium malate 874527-88-5
RL: BCP (Biochemical process); BIOL (Biological study); PROC (Process) (polymer layers for use in toner carrier of reproduction apparatus)
- IT 81-16-3DP, 2-Amino-1-naphthalenesulfonic acid, reaction products with carboxylic acid group-containing hydroxyalkanoic acid copolymers, esterified 82-75-7DP, 1-Naphthylamine-8-sulfonic acid, reaction products with carboxylic acid group-containing hydroxyalkanoic acid copolymers, esterified compds. 88-21-1DP, 2-Aminobenzenesulfonic acid, reaction products with carboxylic acid group-containing hydroxyalkanoic acid copolymers, esterified compds. 88-44-8DP, p-Toluidine-2-sulfonic acid, reaction products with carboxylic acid group-containing hydroxyalkanoic acid copolymers, esterified 107-35-7DP, Taurine, reaction products with carboxylic acid group-containing hydroxyalkanoic acid copolymers 501-53-1DP, Benzyl chloroformate, carboxylation compound with polyhydroxyalkanoates, reaction products with sulfonic acid group-containing amines, esterified 5437-45-6DP, Benzyl bromoacetate, carboxylation compound with polyhydroxyalkanoates, reaction products with sulfonic acid group-containing amines, esterified 13244-33-2DP, 4-Methoxyaniline-2-sulfonic acid, reaction products with carboxylic acid group-containing hydroxyalkanoic acid copolymers 14660-52-7DP, Ethyl 5-bromovalerate, carboxylation compound with polyhydroxyalkanoates, reaction products with sulfonic acid group-containing amines, esterified 26063-00-3DP, 3-Hydroxybutyric acid homopolymer, carboxylation product, reaction products with sulfonic acid group-containing amines, esterified 26161-42-2DP, L-Lactide homopolymer sru, carboxylation product, reaction products with sulfonic acid group-containing amines, esterified 26744-04-7DP, 3-Hydroxybutyric acid homopolymer sru, carboxylation product, reaction products with sulfonic acid group-containing amines, esterified 29823-21-6DP, Ethyl 8-bromooctanoate, carboxylation compound with polyhydroxyalkanoates, reaction products with sulfonic acid group-containing amines, esterified 33135-50-1DP, L-Lactide homopolymer, carboxylation product, reaction products with sulfonic acid group-containing amines, esterified 34409-67-1DP, carboxylation product, reaction products with sulfonic acid

group-containing amines, esterified 68227-69-ODP,
 2-Aminobenzenesulfonic acid phenyl ester, reaction products with
 carboxylic acid group-containing hydroxyalkanoic acid copolymers,
 esterified 86311-35-5DP, 2-Amino-2-methylpropanesulfonic acid,
 reaction products with carboxylic acid group-containing
 hydroxyalkanoic acid copolymers 172923-04-5DP,
 3-Hydroxy-5-phenylvaleric acid homopolymer, carboxylation product,
 reaction products with sulfonic acid group-containing amines,
 esterified 213316-74-6DP, carboxylation product, reaction
 products with sulfonic acid group-containing amines, esterified
 213316-75-7DP, carboxylation product, reaction products with
 sulfonic acid group-containing amines, esterified 213316-77-9DP,
 carboxylation product, reaction products with sulfonic acid
 group-containing amines, esterified 213316-79-1DP,
 Poly[oxy(1-hexyl-2-oxo-1,2-ethanediyl)], carboxylation product,
 reaction products with sulfonic acid group-containing amines,
 esterified 340255-66-5DP, carboxylation product, reaction
 products with sulfonic acid group-containing amines, esterified
 347867-66-7DP, carboxylation product, reaction products
 with sulfonic acid group-containing amines, esterified
 347867-67-8DP, carboxylation product, reaction products with
 sulfonic acid group-containing amines, esterified 494210-48-9DP,
 carboxylation product, reaction products with sulfonic acid
 group-containing amines, esterified 871720-57-9DP, Benzyl
 7-oxo-4-oxepanecarboxylate-L-lactide copolymer, debenzylated,
 reaction products with sulfonic acid group-containing amines,
 esterified compds. 872413-53-1DP, oxidized, reaction products
 with sulfonic acid group-containing amines, esterified compds.
 872413-55-3DP, oxidized, reaction products with sulfonic acid
 group-containing amines 872413-57-5DP, oxidized 872413-59-7DP,
 oxidized 875814-39-4DP, oxidized 875814-42-9DP, carboxylation
 product, reaction products with sulfonic acid group-containing amines,
 esterified 875902-95-7DP, debenzylated, reaction
 products with sulfonic acid group-containing amines 875902-96-8DP,
 oxidized, reaction products with sulfonic acid group-containing amines
 875902-96-8P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
 or engineered material use); PREP (Preparation); USES (Uses)
 (polymer layers for use in toner carrier of reproduction apparatus)

IT 1676-73-9P, L-Glutamic acid γ -benzyl ester
 26161-42-2P, L-Lactide homopolymer sru 33135-50-1P, L-Lactide
 homopolymer 34409-67-1P 156693-50-4P 213316-74-6P
 213316-75-7P 213316-77-9P 213316-79-1P, Poly[oxy(1-hexyl-2-oxo-
 1,2-ethanediyl)] 494210-48-9P 871720-57-9P, Benzyl
 7-oxo-4-oxepanecarboxylate-L-lactide copolymer
 872139-37-2P 872139-38-3P 872413-52-0P
 872413-53-1P 872413-55-3P 872413-57-5P 872413-59-7P
 875814-39-4P 875902-95-7P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP
 (Preparation); RACT (Reactant or reagent)
 (polymer layers for use in toner carrier of reproduction apparatus)

IT 56-86-0, L-Glutamic acid, reactions 100-51-6, Benzyl
 alcohol, reactions 25542-62-5B, Ethyl 6-bromohexanoate,
 carboxylation compound with polyhydroxyalkanoates,
 reaction products with sulfonic acid group-containing amines,
 esterified 872413-66-6

RL: RCT (Reactant); RACT (Reactant or reagent)
 (polymer layers for use in toner carrier of reproduction apparatus)

L89 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:1330768 HCAPLUS Full-text
 DOCUMENT NUMBER: 144:70260
 TITLE: Polyhydroxyalkanoic acid having
 ester, carboxyl or sulfonic acid group and
 producing method therefor
 INVENTOR(S): Kenmoku, Takashi; Mihara, Chieko; Fukui,

10/579,805-270119-EIC 1700 SEARCH

PATENT ASSIGNEE(S): Tatsuki; Kusakari, Ako; Yano, Tetsuya
 SOURCE: Canon Kabushiki Kaisha, Japan
 PCT Int. Appl., 160 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005121208	A1	20051222	WO 2005-JP11000	2005 0609
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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2006022321	A	20060126	JP 2005-168914	2005 0608
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WO 2005121204	A2	20051222	WO 2005-JP10996	2005 0609
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PRIORITY APPLN. INFO.:		JP 2004-174788	A	

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JP 2005-168914

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WO 2005-JP10996

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WO 2005-JP11000

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2005
0609

ED Entered STN: 22 Dec 2005

AB The invention is to provide a novel polyhydroxyalkanoate having a reactive functional group within a mol., a novel polyhydroxyalkanoate having a novel function by a chemical modification of the polyhydroxyalkanoate having the reactive functional group, and a producing method therefor. A polyhydroxyalkanoate containing a unit having a carboxyl group in a side chain is utilized for deriving a polyhydroxyalkanoate containing a unit having an amide group and a sulfonic acid group in the mol. The polyhydroxyalkanoate is useful for medical soft members due to its excellent melt processability and biocompatibility.

IT 2969-81-5DP, Ethyl 4-bromobutyrate, reaction products with polyhydroxyalkanoates, hydrolyzed 3395-91-3DP, Methyl 3-bromopropionate, reaction products with polyhydroxyalkanoates, hydrolyzed 5437-45-6DP, Benzyl bromoacetate, reaction products with polyhydroxyalkanoates, hydrolyzed 14660-52-7DP, Ethyl 5-bromovalerate, reaction products with polyhydroxyalkanoates, hydrolyzed 25542-62-5DP, Ethyl 6-bromohexanoate, reaction products with polyhydroxyalkanoates, hydrolyzed 29823-21-0DP, Ethyl 8-bromooctanoate, reaction products with polyhydroxyalkanoates, hydrolyzed 54545-52-7DP, Methyl 2-acrylamido-2-methylpropanesulfonate, reaction products with microbial polyhydroxyalkanoates
 RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (production of polyhydroxyalkanoic acid having ester, carboxyl or sulfonic acid group)

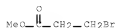
RN 2969-81-5 HCAPLUS

CN Butanoic acid, 4-bromo-, ethyl ester (CA INDEX NAME)



RN 3395-91-3 HCAPLUS

CN Propanoic acid, 3-bromo-, methyl ester (CA INDEX NAME)



RN 5437-45-6 HCAPLUS

CN Acetic acid, 2-bromo-, phenylmethyl ester (CA INDEX NAME)



RN 14660-52-7 HCAPLUS
 CN Pentanoic acid, 5-bromo-, ethyl ester (CA INDEX NAME)



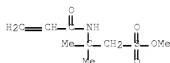
RN 25542-62-5 HCAPLUS
 CN Hexanoic acid, 6-bromo-, ethyl ester (CA INDEX NAME)



RN 29823-21-0 HCAPLUS
 CN Octanoic acid, 8-bromo-, ethyl ester (CA INDEX NAME)



RN 54545-52-7 HCAPLUS
 CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, methyl ester (9CI) (CA INDEX NAME)



IC ICM C08G063-08
 ICS C08G063-688; C08G063-685; C08G063-91
 CC 35-8 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 63
 ST polyhydroxyalkanoic acid ester carboxyl sulfonic medical
 soft member
 IT Polyesters, preparation
 RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL
 (Biological study); PREP (Preparation); USES (Uses)
 (hydroxycarboxylic acid-based, microbial; production of
 polyhydroxyalkanoic acid having ester, carboxyl or
 sulfonic acid group)
 IT Biodegradable materials
 Medical goods
 (production of polyhydroxyalkanoic acid having ester,

- carboxyl or sulfonic acid group)
- IT 34409-67-1P, Poly(3,6-bis(phenylmethyl)-1,4-dioxane-2,5-dione),
SRU
RL: IMF (Industrial manufacture); RCT (Reactant); PREP
(Preparation); RACT (Reactant or reagent)
(microbial; polyhydroxyalkanoic acid having ester,
carboxyl or sulfonic acid group and producing method therefor)
- IT 34409-67-1DP, 3,6-Bis(phenylmethyl)-1,4-dioxane-2,5-dione
homopolymer, SRU, esters, carboxylic acid, sulfonic acid, and
methylsulfonates derivs.
RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
(microbial; polyhydroxyalkanoic acid having ester,
carboxyl or sulfonic acid group and producing method therefor)
- IT 26161-42-2P 28606-15-7DP, 3,6-Diisopropyl-1,4-dioxane-2,5-dione
homopolymer, esters, carboxylic acid, sulfonic acid, and
methylsulfonates derivs. 28606-15-7P, Poly(3,6-diisopropyl-1,4-
dioxane-2,5-dione) 28702-33-2P, Poly(3,6-diisopropyl-1,4-dioxane-
2,5-dione), SRU 31779-80-3P, Poly[oxy(1-ethyl-2-oxo-1,2-
ethanediyl)] 33135-50-1P, Poly(L-lactide) 112832-41-4P
213316-77-9P, Poly(3,6-diethyl-1,4-dioxane-2,5-dione)
213316-79-1P, Poly(3,6-diethyl-1,4-dioxane-2,5-dione), SRU
494210-48-9P, Poly(3,6-bis(phenylmethyl)-1,4-dioxane-2,5-dione)
RL: IMF (Industrial manufacture); RCT (Reactant); PREP
(Preparation); RACT (Reactant or reagent)
(microbial; production of polyhydroxyalkanoic acid having
ester, carboxyl or sulfonic acid group)
- IT 26161-42-2DP, L-Lactide homopolymer, SRU, esters, carboxylic acid,
sulfonic acid, and methylsulfonates derivs. 28702-33-2DP,
3,6-Diisopropyl-1,4-dioxane-2,5-dione homopolymer, SRU, esters,
carboxylic acid, sulfonic acid, and methylsulfonates derivs.
31779-80-3DP, 3,6-Diethyl-1,4-dioxane-2,5-dione homopolymer, SRU,
esters, carboxylic acid, sulfonic acid, and methylsulfonates
derivs. 33135-50-1DP, esters, carboxylic acid, sulfonic acid,
and methylsulfonates derivs. 112832-41-4DP, esters, carboxylic
acid, sulfonic acid, and methylsulfonates derivs. 213316-77-9DP,
3,6-Diethyl-1,4-dioxane-2,5-dione homopolymer, esters, carboxylic
acid, sulfonic acid, and methylsulfonates derivs. 213316-79-1DP,
3,6-Diethyl-1,4-dioxane-2,5-dione homopolymer, SRU, esters,
carboxylic acid, sulfonic acid, and methylsulfonates derivs.
494210-48-9DP, 3,6-Bis(phenylmethyl)-1,4-dioxane-2,5-dione
homopolymer, esters, carboxylic acid, sulfonic acid, and
methylsulfonates derivs.
RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
(microbial; production of polyhydroxyalkanoic acid having
ester, carboxyl or sulfonic acid group)
- IT 67-56-1DP, Methanol, esters with sulfonic group-containing
polyhydroxyalkanoates derivs. 81-16-3DP,
2-Amino-1-naphthalenesulfonic acid, amides with carboxyl-containing
polyhydroxyalkanoates, esters with methanol 82-75-7DP,
1-Naphthylamine-8-sulfonic acid, amides with carboxyl-containing
polyhydroxyalkanoates, esters with methanol 88-21-1DP,
2-Aminobenzenesulfonic acid, amides with carboxyl-containing
polyhydroxyalkanoates, esters with methanol 88-44-8DP,
p-Toluidine-2-sulfonic acid, amides with carboxyl-containing
polyhydroxyalkanoates, esters with methanol 107-35-7DP,
Taurine, amides with carboxyl-containing polyhydroxyalkanoates
, esters with methanol 121-57-3DP, 4-Aminobenzenesulfonic acid,
amides with carboxyl-containing polyhydroxyalkanoates,
esters with methanol 501-53-1DP, Benzyl chloroformate, reaction
products with polyhydroxyalkanoates, hydrolyzed
2969-81-5DP, Ethyl 4-bromobutyrate, reaction products with
polyhydroxyalkanoates, hydrolyzed 3395-91-3DP,
Methyl 3-bromopropionate, reaction products with
polyhydroxyalkanoates, hydrolyzed 5437-45-6DP,
Benzyl bromoacetate, reaction products with

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polyhydroxyalkanoates, hydrolyzed 13244-33-2DP,
 4-Methoxyaniline-2-sulfonic acid, amides with carboxyl-containing
 polyhydroxyalkanoates, esters with methanol
 13664-52-7DP, Ethyl 5-bromovalerate, reaction products
 with polyhydroxyalkanoates, hydrolyzed
 25542-62-5DP, Ethyl 6-bromohexanoate, reaction products
 with polyhydroxyalkanoates, hydrolyzed
 19823-11-6DP, Ethyl 8-bromooctanoate, reaction products
 with polyhydroxyalkanoates, hydrolyzed 40307-20-8DP,
 4-Aminobenzenesulfonic acid phenyl ester, amides with
 carboxyl-containing polyhydroxyalkanoates, hydrolyzed,
 esters with methanol 54545-52-7DP, Methyl
 2-acrylamido-2-methylpropanesulfonate, reaction products with
 microbial polyhydroxyalkanoates 68227-69-ODP,
 2-Aminobenzenesulfonic acid phenyl ester, amides with
 carboxyl-containing polyhydroxyalkanoates, esters with
 methan 86311-35-5DP, 2-Amino-2-methylpropanesulfonic acid,
 amides with carboxyl-containing polyhydroxyalkanoates,
 esters with methanol
 RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL
 (Biological study); PREP (Preparation); USES (Uses)
 (production of polyhydroxyalkanoic acid having ester,
 carboxyl or sulfonic acid group)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L89 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1330628 HCAPLUS Full-text

DOCUMENT NUMBER: 144:70259

TITLE: Polyhydroxyalkanoate having ester
 group, carboxyl group, and sulfonic group, and
 method of producing the same

INVENTOR(S): Kenmoku, Takashi; Mihara, Chieko; Fukui,
 Tatsuki; Kusakari, Aiko

PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan; Yano, Tetsuya

SOURCE: PCT Int. Appl., 220 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005121205	A2	20051222	WO 2005-JP10997	2005 0609

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WO 2005121205 A3 20060209

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 MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
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 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TG, UG, ZM,
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 CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT,
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 CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP 2006022323 A 20060126 JP 2005-168916

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WO 2005121207	A2	20051222	WO 2005-JP10999	2005 0609
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WO 2005121207	A3	20060330		
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PRIORITY APPLN. INFO.:			JP 2004-174783	A 2004 0611
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			JP 2005-168916	A 2005 0608
			WO 2005-JP10997	W 2005 0609
			WO 2005-JP10999	W 2005 0609
ED	Entered STN: 22 Dec 2005			
AB	The invention relates to a novel polyhydroxyalkanoate having a reactive functional group in a mol. and a method of producing the same; and a novel polyhydroxyalkanoate having a new function obtained by chemical modifying the polyhydroxyalkanoate having a reactive functional group and a method of producing the same. A polyhydroxyalkanoate containing units having a carboxyl group, an amide group, and a sulfonic group in a mol. is induced. The polyhydroxyalkanoate is useful for medical soft members due to its excellent melt processability and biocompatibility.			
IT	141455-97-2P, R-3-Hydroxybutyric acid isotactic homopolymer 172923-04-5P, R-3-Hydroxy-5-phenylvaleric acid isotactic homopolymer 483343-37-9P, R-3-Hydroxy-5-phenoxyvaleric acid isotactic homopolymer 591251-65-9P, R-3-Hydroxy-4-cyclohexylbutyric acid isotactic homopolymer RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (microbial; production of polyhydroxyalkanoate having ester group, carboxyl group, and sulfonic group for medical soft members)			
RN	141455-97-2 HCAPLUS			
CN	Butanoic acid, 3-hydroxy-, (3R)-, homopolymer, isotactic (CA INDEX NAME)			

CM 1

CRN 625-72-9

CMF C4 H8 O3

Absolute stereochemistry. Rotation (-).



RN 172923-04-5 HCAPLUS

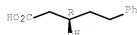
CN Benzenepentanoic acid, β -hydroxy-, (β R)-, homopolymer, isotactic (9CI) (CA INDEX NAME)

CM 1

CRN 153744-07-1

CMF C11 H14 O3

Absolute stereochemistry.



RN 483343-37-9 HCAPLUS

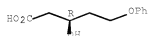
CN Pentanoic acid, 3-hydroxy-5-phenoxy-, (3R)-, homopolymer, isotactic (9CI) (CA INDEX NAME)

CM 1

CRN 173395-00-1

CMF C11 H14 O4

Absolute stereochemistry.



RN 591251-65-9 HCAPLUS

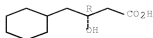
CN Cyclohexanepentanoic acid, β -hydroxy-, (β R)-, homopolymer, isotactic (9CI) (CA INDEX NAME)

CM 1

CRN 483343-33-5

CMF C10 H18 O3

Absolute stereochemistry.



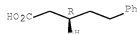
IT 141455-97-2DP, Microbial poly(3-hydroxybutyrate), esters, carboxylic acid, sulfonic acid, and methylsulfonates derivs. 172923-04-5DP, R-3-Hydroxy-5-phenylvaleric acid isotactic homopolymer, esters, carboxylic acid, sulfonic acid, and methylsulfonates derivs. 483343-37-9DP, R-3-Hydroxy-5-phenoxyvaleric acid isotactic homopolymer, esters, carboxylic acid, sulfonic acid, and methylsulfonates derivs. 591231-65-9DP, R-3-Hydroxy-4-cyclohexylbutyric acid isotactic homopolymer, esters, carboxylic acid, sulfonic acid, and methylsulfonates derivs.
 RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (microbial; production of polyhydroxyalkanoate having ester group, carboxyl group, and sulfonic group for medical soft members)
 RN 141455-97-2 HCAPLUS
 CN Butanoic acid, 3-hydroxy-, (3R)-, homopolymer, isotactic (CA INDEX NAME)
 CM 1
 CRN 625-72-9
 CMF C4 H8 O3

Absolute stereochemistry. Rotation (-).



RN 172923-04-5 HCAPLUS
 CN Benzenepentanoic acid, β -hydroxy-, (β R)-, homopolymer, isotactic (9CI) (CA INDEX NAME)
 CM 1
 CRN 153744-07-1
 CMF C11 H14 O3

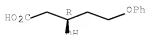
Absolute stereochemistry.



RN 483343-37-9 HCAPLUS
 CN Pentanoic acid, 3-hydroxy-5-phenoxy-, (3R)-, homopolymer, isotactic (9CI) (CA INDEX NAME)
 CM 1
 CRN 173395-00-1

CMF C11 H14 O4

Absolute stereochemistry.



RN 591251-65-9 HCAPLUS

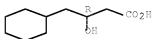
CN Cyclohexanecarboxylic acid, β -hydroxy-, (βR)-, homopolymer, isotactic (9CI) (CA INDEX NAME)

CM 1

CRN 483343-33-5

CMF C10 H18 O3

Absolute stereochemistry.



IT 2969-81-5DP, Ethyl 4-bromobutyrate, reaction products with polyhydroxyalkanoates, hydrolyzed 3395-91-3DP, reaction products with polyhydroxyalkanoates, hydrolyzed 5437-45-6DP, reaction products with polyhydroxyalkanoates, hydrolyzed 14660-52-7DP, Ethyl 5-bromovalerate, reaction products with polyhydroxyalkanoates, hydrolyzed 25542-62-5DP, Ethyl 6-bromohexanoate, reaction products with polyhydroxyalkanoates, hydrolyzed 29823-21-UDP, Ethyl 8-bromooctanoate, reaction products with polyhydroxyalkanoates, hydrolyzed 54545-52-7DP, Methyl 2-acrylamido-2-methylpropanesulfonate, reaction products with microbial polyhydroxyalkanoates

RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(production of polyhydroxyalkanoate having ester group, carboxyl group, and sulfonic group for medical soft members)

RN 2969-81-5 HCAPLUS

CN Butanoic acid, 4-bromo-, ethyl ester (CA INDEX NAME)



RN 3395-91-3 HCAPLUS

CN Propanoic acid, 3-bromo-, methyl ester (CA INDEX NAME)



RN 5437-45-6 HCAPLUS
 CN Acetic acid, 2-bromo-, phenylmethyl ester (CA INDEX NAME)



RN 14660-52-7 HCAPLUS
 CN Pentanoic acid, 5-bromo-, ethyl ester (CA INDEX NAME)



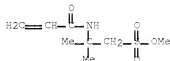
RN 25542-62-5 HCAPLUS
 CN Hexanoic acid, 6-bromo-, ethyl ester (CA INDEX NAME)



RN 29823-21-0 HCAPLUS
 CN Octanoic acid, 8-bromo-, ethyl ester (CA INDEX NAME)



RN 54545-52-7 HCAPLUS
 CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, methyl ester (9CI) (CA INDEX NAME)



IC ICM C08G063-00
 CC 35-8 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 63
 ST polyhydroxyalkanoate ester carboxyl sulfonic
 IT Cupriavidus necator
 (TB 24 strain, microbial; production of
 polyhydroxyalkanoate having ester group, carboxyl
 group, and sulfonic group for medical soft members)
 IT Polyesters, preparation
 RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL

- (Biological study); PREP (Preparation); USES (Uses)
(hydroxycarboxylic acid-based, microbial; production of polyhydroxyalkanoate having ester group, carboxyl group, and sulfonic group for medical soft members)
- IT Biodegradable materials
Medical goods
(production of polyhydroxyalkanoate having ester group, carboxyl group, and sulfonic group for medical soft members)
- IT 31759-58-7P, Poly(D-3-hydroxybutyric acid), SRU
141455-97-2P, R-3-Hydroxybutyric acid isotactic homopolymer 172923-04-5P, R-3-Hydroxy-5-phenylvaleric acid isotactic homopolymer 340255-66-5P, Poly(D-3-hydroxy-5-phenylvaleric acid), SRU 483343-37-9P, R-3-Hydroxy-5-phenoxyvaleric acid isotactic homopolymer 483343-40-4P, Poly(D-3-hydroxy-5-phenoxyvaleric acid), SRU 591251-65-9P, R-3-Hydroxy-4-cyclohexylbutyric acid isotactic homopolymer 591251-79-5P, Poly(D-3-hydroxy-4-cyclohexylbutyric acid), SRU
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(microbial; production of polyhydroxyalkanoate having ester group, carboxyl group, and sulfonic group for medical soft members)
- IT 31759-58-7DP, Microbial poly(3-hydroxybutyrate), sru, esters, carboxylic acid, sulfonic acid, and methylsulfonates derivs. 141455-97-2DP, Microbial poly(3-hydroxybutyrate), esters, carboxylic acid, sulfonic acid, and methylsulfonates derivs. 172923-04-5DP, R-3-Hydroxy-5-phenylvaleric acid isotactic homopolymer, esters, carboxylic acid, sulfonic acid, and methylsulfonates derivs. 340255-66-5DP, Poly(D-3-hydroxy-5-phenylvaleric acid), SRU, esters, carboxylic acid, sulfonic acid, and methylsulfonates derivs. 483343-37-9DP, R-3-Hydroxy-5-phenoxyvaleric acid isotactic homopolymer, esters, carboxylic acid, sulfonic acid, and methylsulfonates derivs. 483343-40-4DP, Poly(D-3-hydroxy-5-phenoxyvaleric acid), SRU, esters, carboxylic acid, sulfonic acid, and methylsulfonates derivs. 591251-65-9DP, R-3-Hydroxy-4-cyclohexylbutyric acid isotactic homopolymer, esters, carboxylic acid, sulfonic acid, and methylsulfonates derivs. 591251-79-5DP, Poly(D-3-hydroxy-4-cyclohexylbutyric acid), SRU, esters, carboxylic acid, sulfonic acid, and methylsulfonates derivs.
RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(microbial; production of polyhydroxyalkanoate having ester group, carboxyl group, and sulfonic group for medical soft members)
- IT 67-56-1DP, Methanol, esters with sulfonic group-containing polyhydroxyalkanoate derivs. 81-16-3DP, amides with carboxyl-containing polyhydroxyalkanoates, esters with methanol 82-75-7DP, 1-Naphthylamine-8-sulfonic acid, amides with carboxyl-containing polyhydroxyalkanoates, esters with methanol 88-21-1DP, amides with carboxyl-containing polyhydroxyalkanoates, esters with methanol 88-44-8DP, p-Toluidine-2-sulfonic acid, amides with carboxyl-containing polyhydroxyalkanoates, esters with methanol 107-35-7DP, amides with carboxyl-containing polyhydroxyalkanoates, esters with methanol 121-57-3DP, amides with carboxyl-containing polyhydroxyalkanoates, esters with methanol 501-53-1DP, reaction products with polyhydroxyalkanoates, hydrolyzed 2969-81-5DP, Ethyl 4-bromobutyrate, reaction products with polyhydroxyalkanoates, hydrolyzed 3395-91-3DP, reaction products with polyhydroxyalkanoates, hydrolyzed 5437-45-6DP, reaction products with polyhydroxyalkanoates, hydrolyzed 13244-33-2DP, 4-Methoxyaniline-2-sulfonic acid, amides with carboxyl-containing polyhydroxyalkanoates, esters with methanol 14660-52-7DP, Ethyl 5-bromovalerate, reaction products

with polyhydroxyalkanoates, hydrolyzed
 25542-62-5DP, Ethyl 6-bromohexanoate, reaction products
 with polyhydroxyalkanoates, hydrolyzed
 39823-21-9DP, Ethyl 8-bromooctanoate, reaction products
 with polyhydroxyalkanoates, hydrolyzed 40307-20-8DP,
 amides with carboxyl-containing polyhydroxyalkanoates,
 hydrolyzed, esters with methanol 54545-52-7DP, Methyl
 2-acrylamido-2-methylpropanesulfonate, reaction products with
 microbial polyhydroxyalkanoates 68227-69-ODP, amides
 with carboxyl-containing polyhydroxyalkanoates, esters with
 methanol 86311-35-5DP, 2-Amino-2-methylpropanesulfonic acid,
 amides with carboxyl-containing polyhydroxyalkanoates,
 esters with methanol
 RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL
 (Biological study); PREP (Preparation); USES (Uses)
 (production of polyhydroxyalkanoate having ester group,
 carboxyl group, and sulfonic group for medical soft members)

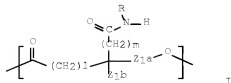
L89 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:1349013 HCAPLUS Full-text
 DOCUMENT NUMBER: 144:97627
 TITLE: Resin-coated carrier for electrophotographic
 developer
 INVENTOR(S): Yano, Tetsuya; Kenmoku, Takashi; Mihara,
 Chieko; Fukui, Tatsuki; Kusakari, Aki;
 Fujimoto, Norikazu
 PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan
 SOURCE: U.S. Pat. Appl. Publ., 73 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050287484	A1	20051229	US 2005-165357	2005 0624
JP 2006039533	A	20060209	JP 2005-185637	2005 0624
PRIORITY APPLN. INFO.:			JP 2004-186453	A 2004 0624

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ED Entered STN: 29 Dec 2005
 GI



AB The present invention provides a resin-coated carrier for an electrophotog. developer capable of providing an image with excellent image quality; and a two-component

10/579,805-270119-EIC 1700 SEARCH

developer and a replenishing developer each of which contains the resin-coated carrier as a constituent. A resin-coated carrier for an electrophotog. developer, includes: a core; and a resin coating layer containing a polyhydroxyalkanoate containing one or more units each represented by I (R = AlSO2R1; R1 = OH, halogen atom, ONa, OK, etc.; when l represents an integer selected from 2 to 4, Z1a represents nothing or a linear alkylene chain having 1 to 4 carbon atoms, Z1b represents a hydrogen atom, and m represents an integer selected from 0 to 8; when l represents 1 and Z1a represents a linear alkylene chain having 1 to 4 carbon atoms, Z1b represents a hydrogen atom and m represents an integer selected from 0 to 8; when l represents 1 and Z1a represents nothing, Z1b represents a hydrogen atom and m represents 0; when l represents 0 and Z1a represents a linear alkylene chain having 1 to 4 carbon atoms, the linear alkylene chain may be substituted by a linear or branched alkyl group, or an alkyl group containing a residue having any one of a Ph structure, a thienyl structure, and a cyclohexyl structure at a terminal thereof, Z1b represents a hydrogen atom, or a linear or branched alkyl group, aryl group, or aralkyl group which may be substituted by an aryl group, and m represents an integer selected from 0 to 8; and when l represents 0 and Z1a represents nothing, Z1b represents a hydrogen atom, or a linear or branched alkyl group, aryl group, or aralkyl group which may be substituted by an aryl group, and m represents an integer selected from 0 to 8).

- IT 5437-45-6DP, Benzyl bromoacetate, reaction product with polyhydroxyalkanoate 14660-52-7DP, Ethyl 5-bromovalerate, reaction product with polyhydroxyalkanoate 25542-62-5DP, Ethyl 6-bromohexanoate, reaction product with polyhydroxyalkanoate 26063-00-3P 29823-21-0DP, Ethyl 8-Bromooctanoate, reaction product with polyhydroxyalkanoate 134736-36-0P 247867-66-7P 350803-33-7P 872139-39-4P
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of resin-coated carrier for electrophotog. developer)
- RN 5437-45-6 HCAPLUS
- CN Acetic acid, 2-bromo-, phenylmethyl ester (CA INDEX NAME)



- RN 14660-52-7 HCAPLUS
- CN Pentanoic acid, 5-bromo-, ethyl ester (CA INDEX NAME)



- RN 25542-62-5 HCAPLUS
- CN Hexanoic acid, 6-bromo-, ethyl ester (CA INDEX NAME)

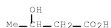


- RN 26063-00-3 HCAPLUS
- CN Butanoic acid, 3-hydroxy-, homopolymer (CA INDEX NAME)

CM 1

10/579,805-270119-EIC 1700 SEARCH

CRN 300-85-6
CMF C4 H8 O3



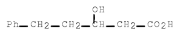
RN 29823-21-0 HCAPLUS
CN Octanoic acid, 8-bromo-, ethyl ester (CA INDEX NAME)



RN 134736-36-0 HCAPLUS
CN Benzenepentanoic acid, β -hydroxy-, homopolymer (9CI) (CA INDEX NAME)

CM 1

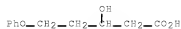
CRN 41479-99-6
CMF C11 H14 O3



RN 347867-66-7 HCAPLUS
CN Pentanoic acid, 3-hydroxy-5-phenoxy-, homopolymer (9CI) (CA INDEX NAME)

CM 1

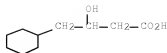
CRN 155638-20-3
CMF C11 H14 O4



RN 350803-33-7 HCAPLUS
CN Cyclohexanepentanoic acid, β -hydroxy-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 187101-75-3
CMF C10 H18 O3



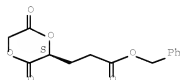
RN 872139-39-4 HCAPLUS
 CN 1,4-Dioxane-2-propanoic acid, 3,6-dioxo-, phenylmethyl ester,
 (2S)-, polymer with (3S,6S)-3,6-bis(phenylmethyl)-1,4-dioxane-2,5-
 dione (9CI) (CA INDEX NAME)

CM 1

CRN 872139-38-3

CMF C14 H14 O6

Absolute stereochemistry.

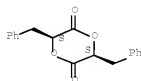


CM 2

CRN 260413-46-5

CMF C18 H16 O4

Absolute stereochemistry.



IT 26063-00-3DP, hydrolyzed, reaction product with benzyl
 chloroformate or benzyl bromoacetate, amides with Me
 aminobenzenesulfonate or Me aminomethylpropanesulfonate
 54545-52-7DP, Methyl 2-Acrylamido-2-
 methylpropanesulfonate, reaction product with Ph lactide
 homopolymer 134736-36-9DP, oxidized, reaction product
 with benzyl chloroformate or Et bromohexanoate, amides with Me
 aminobenzenesulfonate 347867-66-7DP, oxidized, reaction
 product with benzyl chloroformate, amides with Me
 aminobenzenesulfonate 350803-33-7DP, oxidized, reaction
 product with benzyl chloroformate, amides with Me
 aminomaphthalenesulfonate 872139-39-4DP, hydrolyzed,
 amides with aminobenzenesulfonic acid
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical
 or engineered material use); PREP (Preparation); USES (Uses)
 (preparation of resin-coated carrier for electrophotog. developer)

RN 26063-00-3 HCAPLUS

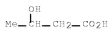
10/579,805-270119-EIC 1700 SEARCH

CN Butanoic acid, 3-hydroxy-, homopolymer (CA INDEX NAME)

CM 1

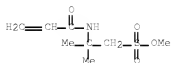
CRN 300-85-6

CMF C4 H8 O3



RN 54545-52-7 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, methyl ester (9CI) (CA INDEX NAME)



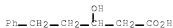
RN 134736-36-0 HCAPLUS

CN Benzenepentanoic acid, β -hydroxy-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 41479-99-6

CMF C11 H14 O3



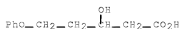
RN 347867-66-7 HCAPLUS

CN Pentanoic acid, 3-hydroxy-5-phenoxy-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 155638-20-3

CMF C11 H14 O4

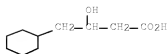


RN 350803-33-7 HCAPLUS

CN Cyclohexanecarboxylic acid, β -hydroxy-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 187101-75-3
CMF C10 H18 O3

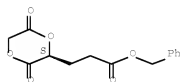


RN 872139-39-4 HCAPLUS
CN 1,4-Dioxane-2-propanoic acid, 3,6-dioxo-, phenylmethyl ester,
(2S)-, polymer with (3S,6S)-3,6-bis(phenylmethyl)-1,4-dioxane-2,5-
dione (9CI) (CA INDEX NAME)

CM 1

CRN 872139-38-3
CMF C14 H14 O6

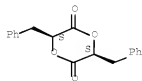
Absolute stereochemistry.



CM 2

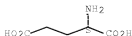
CRN 260413-46-5
CMF C18 H16 O4

Absolute stereochemistry.

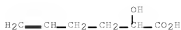


IT 56-86-0, L-Glutamic acid, reactions 272413-66-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of resin-coated carrier for electrophotog. developer)
RN 56-86-0 HCAPLUS
CN L-Glutamic acid (CA INDEX NAME)

Absolute stereochemistry.

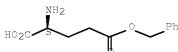


RN 872413-66-6 HCAPLUS
 CN 5-Hexenoic acid, 2-hydroxy- (CA INDEX NAME)



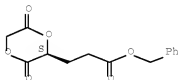
IT 1674-73-9P 872139-38-3P 872413-60-0P
 872413-61-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP
 (Preparation); RACT (Reactant or reagent)
 (preparation of resin-coated carrier for electrophotog. developer)
 RN 1676-73-9 HCAPLUS
 CN L-Glutamic acid, 5-(phenylmethyl) ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

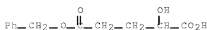


RN 872139-38-3 HCAPLUS
 CN 1,4-Dioxane-2-propanoic acid, 3,6-dioxo-, phenylmethyl ester,
 (2S)- (CA INDEX NAME)

Absolute stereochemistry.

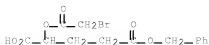


RN 872413-60-0 HCAPLUS
 CN Pentanedioic acid, 2-hydroxy-, 5-(phenylmethyl) ester (CA INDEX
 NAME)



RN 872413-61-1 HCAPLUS
 CN Pentanedioic acid, 2-[(2-bromoacetyl)oxy]-, 5-(phenylmethyl) ester

(CA INDEX NAME)



- IC ICM G03C005-18
 INCL 430434000
 CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35, 38
- IT 88-21-IDP, 2-Aminobenzenesulfonic acid, reaction product with polyhydroxyalkanoate 88-44-8DP, p-Toluidine-2-sulfonic acid, reaction product with polyhydroxyalkanoate 501-53-IDP, Benzyl chloroformate, reaction product with polyhydroxyalkanoate 5437-45-6DP, Benzyl bromoacetate, reaction product with polyhydroxyalkanoate 14660-52-7DP, Ethyl 5-bromovalerate, reaction product with polyhydroxyalkanoate 25542-62-5DP, Ethyl 6-bromohexanoate, reaction product with polyhydroxyalkanoate 26063-00-3P 26161-42-2P 26744-04-7P 28606-14-6P 28702-32-1P 29823-2i-ODP, Ethyl 8-Bromooctanoate, reaction product with polyhydroxyalkanoate 33135-50-1P, L-Lactide homopolymer 86311-35-5DP, 2-Amino-2-methylpropanesulfonic acid, reaction product with polyhydroxyalkanoate 134736-36-0P 260413-47-6P 260414-76-4P 347857-66-7P 350803-3i-7P 871720-57-9P 872159-39-4P 872413-53-1P 872413-55-3DP, oxidized, amides with 2-amino-2-methylpropanesulfonic acid 872413-55-3P 872413-59-7P 872413-62-2P 872413-64-4P 872413-65-5P
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of resin-coated carrier for electrophotog. developer)
- IT 82-75-7DP, 1-Naphthylamine-8-sulfonic acid, reaction product with polyhydroxyalkanoate 107-35-7DP, Taurine, reaction product with Ph lactide homopolymer and Et bromovalerate 13244-33-2DP, 4-Methoxyaniline-2-sulfonic acid, reaction product with polyhydroxyalkanoate 18107-18-1DP, Trimethylsilyldiazomethane, reaction product with polyhydroxyalkanoate 26063-00-2DP, hydrolyzed, reaction product with benzyl chloroformate or benzyl bromoacetate, amides with Me aminobenzenesulfonate or Me aminomethylpropanesulfonate 26161-42-2DP, L-Lactide homopolymer, sru, oxidized, reaction products with benzyl chloroformate or Et bromooctanoate, amides with Me aminonaphthalenesulfonate or Ph aminobenzenesulfonate 26744-04-7DP, hydrolyzed, reaction product with benzyl chloroformate or benzyl bromoacetate, amides with Me aminobenzenesulfonate or Me aminomethylpropanesulfonate 28606-14-6DP, oxidized, reaction product with Et bromovalerate, amides with Me amino-methylpropanesulfonate 28702-32-1DP, oxidized, reaction product with Et bromovalerate, amides with Me amino-methylpropanesulfonate 33135-50-1DP, oxidized, reaction products with benzyl chloroformate or Et bromooctanoate, amides with Me aminonaphthalenesulfonate or Ph aminobenzenesulfonate 54545-52-7DP, Methyl 2-Acrylamido-2-methylpropanesulfonate, reaction product with Ph lactide homopolymer 68227-69-0DP, Phenyl 2-aminobenzene sulfonate, reaction product with lactide homopolymer and Et bromooctanoate 134736-36-0DP, oxidized, reaction product with benzyl chloroformate or Et bromohexanoate, amides with Me aminobenzenesulfonate 260413-47-6DP, hydrolyzed, reaction

10/579,805-270119-EIC 1700 SEARCH

products with benzyl chloroformate or Et bromovalerate, amides with Me aminobenzenesulfonate 260414-76-4DP, hydrolyzed, reaction products with benzyl chloroformate or Et bromovalerate, amides with Me aminobenzenesulfonate 347867-66-7DP, oxidized, reaction product with benzyl chloroformate, amides with Me aminobenzenesulfonate 356803-33-7DP, oxidized, reaction product with benzyl chloroformate, amides with Me aminomaphthalenesulfonate 871720-57-9DP, hydrolyzed, amides with Me naphthylamine-8-sulfonate 872139-29-4DP, hydrolyzed, amides with aminobenzenesulfonic acid 872413-53-1DP, oxidized, amides with Me 2-aminobenzenesulfonate 872413-57-5DP, oxidized, Me esters 872413-58-6DP, oxidized, Me esters 872413-58-6P 872413-59-7DP, oxidized, Me esters 872413-62-2DP, oxidized, amides with methoxyanilinesulfonic acid 872413-64-4DP, oxidized, reaction product with benzyl bromoacetate, amides with aminobenzenesulfonic acid 872413-65-5DP, oxidized, reaction product with benzyl bromoacetate, amides with aminobenzenesulfonic acid

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of resin-coated carrier for electrophotog. developer)

IT 56-86-0, L-Glutamic acid, reactions 22118-09-8, Bromoacetylchloride 872413-66-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of resin-coated carrier for electrophotog. developer)

IT 1676-73-9P 872139-38-3P 872413-52-0P 872413-57-5P 872413-60-0P 872413-61-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of resin-coated carrier for electrophotog. developer)

L89 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:693178 HCAPLUS Full-text

DOCUMENT NUMBER: 139:215251

TITLE: Production of polyhydroxyalkanoate, for charge controlling agent for toner binders in image formation

INVENTOR(S): Fukui, Tatsuki; Sugawa, Etsuko; Yano, Tetsuya; Mihara, Chieko; Imamura, Takeshi; Kenmoku, Takashi

PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan

SOURCE: Eur. Pat. Appl., 107 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1340777	A1	20030903	EP 2003-4349	2003 0228
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EP 1340777	B1	20051214		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004002686	A	20040108	JP 2003-32701	2003 0210
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JP 3639831	B2	20050420		
US 20040005290	A1	20040108	US 2003-373851	2003 0227

10/579,805-270119-EIC 1700 SEARCH

US 6911520 B2 20050628
CN 1440991 A 20030910 CN 2003-106777 2003 0228

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PRIORITY APPLN. INFO.: JP 2002-54906 A 2002 0228

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JP 2002-54908 A 2002 0228

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JP 2003-32701 A 2003 0210

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ED Entered STN: 05 Sep 2003
GI

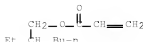
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT

AB Provided is a polyhydroxyalkanoate containing in a mol. thereof one or more units each selected from I, II, III, IV: wherein R1 is selected from OH, a halogen atom, ONa, OK, OCH3 and OC2H5; A1 represents a substituted or unsubstituted aliphatic hydrocarbon structure; m is an integer selected from 0 to 7; and in the case where there exists a plurality of units, R1, A1 and m represent the above described definitions independently for each unit, wherein R6 is selected from OH, a halogen atom, ONa, OK, OCH3 and OC2H5; J6 represents a substituted or unsubstituted aliphatic hydrocarbon structure; n is an integer selected from 0 to 7; r is an integer selected from 1 to 500; and in the case where there exists a plurality of units, R6, J6, n and r represent the above described definitions independently for each unit, wherein n represents an integer of 0 to 7; and in the case where a plurality of units exist in the same mol., n in one unit can be different from that in another unit resp., and wherein m represents an integer of 0 to 7; R1' to R5' represent independently a hydrogen atom or a halogen atom; and in the case where there exists a plurality of units, m and R1' to R5' represent the above described definitions independently for each unit. A polymer was prepared by microbial polymerization of 5-(4-vinylphenyl) valeric acid and 5-Ph valeric acid, followed by reaction with HS(CH2)2CONHCHMe2CH2SO3Na.

IT 103-11-7DF, polymers with polyhydroxyalkanoates
15214-89-8DF, 2-Acrylamido-2-methylpropanesulfonic acid,
graft polymers with polyhydroxyalkanoates
41479-99-6DF, 3-Hydroxy-5-phenyl valeric acid,
polyhydroxyalkanoates, reaction products with thioates
151078-37-4DF, reaction products with
polyhydroxyalkanoates 590378-69-1DF,
polyhydroxyalkanoates, reaction products with thioates
RI: IMF (Industrial manufacture); TEM (Technical or engineered
material use); PREP (Preparation); USES (Uses)
(production of polyhydroxyalkanoate, for charge
controlling agent for toner binders in image formation)

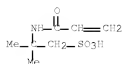
RN 103-11-7 HCAPLUS

CN 2-Propenoic acid, 2-ethylhexyl ester (CA INDEX NAME)

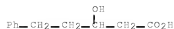


10/579,805-270119-EIC 1700 SEARCH

RN 15214-89-8 HCAPLUS

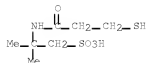
CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-
(CA INDEX NAME)

RN 41479-99-6 HCAPLUS

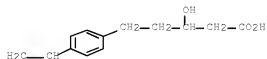
CN Benzenepentanoic acid, β -hydroxy- (CA INDEX NAME)

RN 151078-37-4 HCAPLUS

CN 1-Propanesulfonic acid, 2-[(3-mercapto-1-oxopropyl)amino]-2-methyl-, sodium salt (1:1) (CA INDEX NAME)



RN 590378-69-1 HCAPLUS

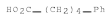
CN Benzenepentanoic acid, 4-ethenyl- β -hydroxy- (CA INDEX NAME)

IT 2270-20-4, 5-Phenyl valeric acid 121739-61-5

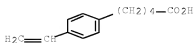
RL: RCT (Reactant); RACT (Reactant or reagent)
 (production of polyhydroxyalkanoates, for charge
 controlling agent for toner binders in image formation)

RN 2270-20-4 HCAPLUS

CN Benzenepentanoic acid (CA INDEX NAME)



RN 121739-61-5 HCAPLUS
 CN Benzenepentanoic acid, 4-ethenyl- (CA INDEX NAME)

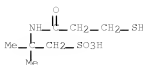


IC ICM C08G063-06
 ICS G03G009-097; C08G063-688; C08G063-682
 CC 37-3 (Plastics Manufacture and Processing)
 ST polyhydroxyalkanoate charge control agent toner binder
 IT Electrophotographic toners
 (binder; production of polyhydroxyalkanoate, for charge
 controlling agent for toner binders in image formation)
 IT Polyesters, preparation
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (hydroxycarboxylic acid-based; production of
 polyhydroxyalkanoate, for charge controlling agent for
 toner binders in image formation)
 IT 100-42-5DP, Styrene, polymers with polyhydroxyalkanoates
 103-11-7DP, polymers with polyhydroxyalkanoates
 371-42-6DP, p-Fluorobenzenethiol, reaction products with
 polyhydroxyalkanoates 771-62-0P, Pentafluorobenzenethiol
 1321-74-0DP, Divinylbenzene, polymers with
 polyhydroxyalkanoates 15214-89-8DP,
 2-Acrylamido-2-methylpropanesulfonic acid, graft polymers with
 polyhydroxyalkanoates 41479-99-6DP,
 3-Hydroxy-5-phenyl valeric acid, polyhydroxyalkanoates,
 reaction products with thioates 151078-37-4DP, reaction
 products with polyhydroxyalkanoates
 590378-69-1DP, polyhydroxyalkanoates, reaction
 products with thioates
 RL: IMF (Industrial manufacture); TEM (Technical or engineered
 material use); PREP (Preparation); USES (Uses)
 (production of polyhydroxyalkanoate, for charge
 controlling agent for toner binders in image formation)
 IT 2270-20-4, 5-Phenyl valeric acid 121739-61-5
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (production of polyhydroxyalkanoate, for charge
 controlling agent for toner binders in image formation)
 REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L89 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2008 ACS ON STN
 ACCESSION NUMBER: 2003:652137 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 139:180848
 TITLE: Production of polyhydroxyalkanoates
 having amide group and sulfonic groups for
 charge controlling agents for toner binders
 INVENTOR(S): Kenmoku, Takashi; Sugawa, Etsuko; Yano,
 Tetsuya; Mihara, Chieko; Imamura, Takeshi;
 Fukui, Tatsuki
 PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan
 SOURCE: Eur. Pat. Appl., 66 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

10/579,805-270119-EIC 1700 SEARCH

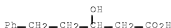
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1336635	A1	20030820	EP 2003-3419	2003 0214
EP 1336635	B1	20070117	<--	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004197063	A	20040715	JP 2003-14704	2003 0123
JP 3689697	B2	20050831	<--	
CN 1446835	A	20031008	CN 2003-104461	2003 0214
US 20040081906	A1	20040429	US 2003-367951	2003 0219
US 6908721	B2	20050621	<--	
PRIORITY APPLN. INFO.:			JP 2002-38399	A 2002 0215
			<--	
			JP 2002-38653	A 2002 0215
			<--	
			JP 2002-310256	A 2002 1024
			<--	
			JP 2003-14704	A 2003 0123
ED			<--	
AB	Entered STN: 21 Aug 2003 A polyhydroxyalkanoate comprises a unit of formula (1): $-\text{[OCH}[(\text{CH}_2)_m\text{SASO}_2\text{R}]\text{CH}_2\text{CO]}-$ wherein R is selected from the group consisting of OH, a halogen atom, ONa, OK, OCH ₃ and OC ₂ H ₅ ; A represents a substituted or unsubstituted aliphatic hydrocarbon structure; m is an integer number selected from 1 to 8; and in the case where a plurality of units exist in the same mol., R, A and m in one unit can be different from them in another unit resp. A method of producing the polyhydroxyalkanoate comprises the step of reacting a polyhydroxyalkanoate containing Br-terminated side groups and a sulfonylamidomercaptan. A polyhydroxyalkanoate was prepared from 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate and a polyhydroxyalkanoate containing 3-hydroxy-8-bromooctanoic acid, 3-hydroxy-6-bromohexanoic acid, and 3-hydroxy-5-phenylvaleric acid repeating units.			
IT	151078-37-4P RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (production of polyhydroxyalkanoates having amide group and sulfonic groups for charge controlling agents for toner binders)			
RN	151078-37-4 HCAPLUS			
CN	1-Propanesulfonic acid, 2-[(3-mercapto-1-oxopropyl)amino]-2-methyl-, sodium salt (1:1) (CA INDEX NAME)			



IT 41479-99-6DP, 3-Hydroxy-5-phenylvaleric acid, polyhydroxyalkanoates, reaction products with 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate 126502-98-5DP, polyhydroxyalkanoates, reaction products with 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate 151078-37-4DP, reaction products with polyhydroxyalkanoates 155636-20-3DP, 3-Hydroxy-5-phenoxyvaleric acid, polyhydroxyalkanoates, reaction products with 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate 581792-64-5DP, polyhydroxyalkanoates, reaction products with 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate 581792-65-6DP, polyhydroxyalkanoates, reaction products with 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate 581792-67-8DP, polyhydroxyalkanoates, reaction products with 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate 581792-69-0DP, polyhydroxyalkanoates, reaction products with 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate 581792-71-4DP, polyhydroxyalkanoates, reaction products with 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (production of polyhydroxyalkanoates having amide group and sulfonic groups for charge controlling agents for toner binders)

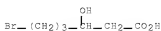
RN 41479-99-6 HCAPLUS

CN Benzenepentanoic acid, β -hydroxy- (CA INDEX NAME)



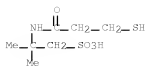
RN 126502-98-5 HCAPLUS

CN Hexanoic acid, 6-bromo-3-hydroxy- (CA INDEX NAME)



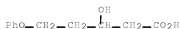
RN 151078-37-4 HCAPLUS

CN 1-Propanesulfonic acid, 2-[(3-mercapto-1-oxopropyl)amino]-2-methyl-, sodium salt (1:1) (CA INDEX NAME)



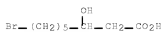
RN 155638-20-3 HCAPLUS

CN Pentanoic acid, 3-hydroxy-5-phenoxy- (CA INDEX NAME)



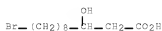
RN 581792-64-5 HCAPLUS

CN Octanoic acid, 8-bromo-3-hydroxy- (CA INDEX NAME)



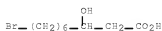
RN 581792-65-6 HCAPLUS

CN Undecanoic acid, 11-bromo-3-hydroxy- (CA INDEX NAME)



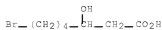
RN 581792-67-8 HCAPLUS

CN Nonanoic acid, 9-bromo-3-hydroxy- (CA INDEX NAME)



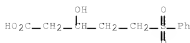
RN 581792-69-0 HCAPLUS

CN Heptanoic acid, 7-bromo-3-hydroxy- (CA INDEX NAME)

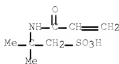


RN 581792-71-4 HCAPLUS

CN Pentanoic acid, 3-hydroxy-5-(phenylsulfonyl)- (CA INDEX NAME)



- IT 15214-89-8, 2-Acrylamido-2-methylpropanesulfonic acid
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (production of polyhydroxyalkanoates having amide group
 and sulfonic groups for charge controlling agents for toner
 binders)
- RN 15214-89-8 HCAPLUS
- CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-
 (CA INDEX NAME)



- IC ICM C08G063-688
 ICS C08G063-91; C12P007-62; G03G009-087
- CC 37-3 (Plastics Manufacture and Processing)
 Section cross-reference(s): 74
- ST polyhydroxyalkanoate amide sulfonate charge control
 agent toner binder
- IT Electrophotographic toners
 (binders, charge control agents for; production of
 polyhydroxyalkanoates having amide group and sulfonic
 groups for charge controlling agents for toner binders)
- IT Polyesters, preparation
 RL: IMF (Industrial manufacture); TEM (Technical or engineered
 material use); PREP (Preparation); USES (Uses)
 (hydroxycarboxylic acid-based; production of
 polyhydroxyalkanoates having amide group and sulfonic
 groups for charge controlling agents for toner binders)
- IT Binders
 (toner, charge control agents for; production of
 polyhydroxyalkanoates having amide group and sulfonic
 groups for charge controlling agents for toner binders)
- IT 151078-37-4P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP
 (Preparation); RACT (Reactant or reagent)
 (production of polyhydroxyalkanoates having amide group
 and sulfonic groups for charge controlling agents for toner
 binders)
- IT 41479-99-6DP, 3-Hydroxy-5-phenylvaleric acid,
 polyhydroxyalkanoates, reaction products with
 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate
 126502-98-5DP, polyhydroxyalkanoates, reaction
 products with 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate
 151078-37-4DP, reaction products with
 polyhydroxyalkanoates 155638-20-3DP,
 3-Hydroxy-5-phenoxyvaleric acid, polyhydroxyalkanoates,
 reaction products with 2-(2'-mercaptoethyl)amide-2-
 methylpropanesulfonate 581792-64-5DP,
 polyhydroxyalkanoates, reaction products with
 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate
 581792-65-5DP, polyhydroxyalkanoates, reaction

10/579,805-270119-EIC 1700 SEARCH

products with 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate
 581792-67-8DP, polyhydroxyalkanoates, reaction
 products with 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate
 581792-69-00E, polyhydroxyalkanoates, reaction
 products with 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate
 581792-71-4DP, polyhydroxyalkanoates, reaction
 products with 2-(2'-mercaptoethyl)amide-2-methylpropanesulfonate
 RL: IMF (Industrial manufacture); TEM (Technical or engineered
 material use); PREP (Preparation); USES (Uses)

(production of polyhydroxyalkanoates having amide group
 and sulfonic groups for charge controlling agents for toner
 binders)

IT 507-09-5, Thioacetic acid, reactions 15214-89-E,

2-Acrylamido-2-methylpropanesulfonic acid

RL: RCT (Reactant); RACT (Reactant or reagent)

(production of polyhydroxyalkanoates having amide group
 and sulfonic groups for charge controlling agents for toner
 binders)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L89 ANSWER 11 OF 16 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 1997:164577 HCAPLUS Full-text

DOCUMENT NUMBER: 126:164330

ORIGINAL REFERENCE NO.: 126:31639a,31642a

TITLE: Water-resistant recording substrates with
 improved ink absorption for water-based
 jet-printing inks

INVENTOR(S): Kondo, Juji; Santo, Takeshi; Tomioka, Hiroshi;
 Sugata, Hiroyuki

PATENT ASSIGNEE(S): Canon Kk, Japan

SOURCE: Jpn. Kokai Tokyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08325992	A	19961210	JP 1995-133806	1995 0531

<--

JP 3761920	B2	20060329
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PRIORITY APPLN. INFO.: JP 1995-133806

1995
0531

<--

ED Entered STN: 10 Mar 1997

AB Ink receptor layers contain mainly (A) alumina hydrate particles and (B) anionic resin emulsions [min. film-forming temperature (MFT) 0-50°, glass-transition temperature (Tg) of dispersed resins 0-90°, particle diameter of dispersed resins 0.07-0.7 µm, pHA - pHE ≤ ±2 (pHA = pH of aqueous solns. containing A at the same concentration with the coating compns., pHE = pH of B)]. Thus, 6 parts (solids) aqueous dispersion (pH 4.0) containing 20% alumina hydrate was mixed with 1 part (solids) Sivinol AS 550 [anionic poly(vinyl acetate) emulsion, MFT 3°, Tg 17°, particle diameter 0.35 µm], applied on a 100-µm film of Lumirror X 21, and dried at 110° to give a substrate. The substrate was jet-printed with 4 inks, resp. containing C.I. Direct Yellow 86, C.I. Acid Red 35, C.I. Direct Blue 35, and C.I. Food Black 2 to show good absorption of inks, no beading, and good water resistance.

IT 6441-93-6, C.I. Acid Red 35

RL: TEM (Technical or engineered material use); USES (Uses)

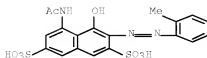
(dyes; water-resistant recording substrates coated with alumina

10/579,805-270119-EIC 1700 SEARCH

hydrate and anionic resin emulsions with improved ink
absorption for water-based jet-printing inks)

RN 6441-93-6 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-(acetylamino)-4-hydroxy-3-[2-(2-methylphenyl)diazonyl]-, sodium salt (1:2) (CA INDEX NAME)



● Na

IT 9003-20-7D, Poly(vinyl acetate), anionic

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(water-resistant recording substrates coated with alumina
hydrate and anionic resin emulsions with improved ink
absorption for water-based jet-printing inks)

RN 9003-20-7 HCAPLUS

CN Acetic acid ethenyl ester, homopolymer (CA INDEX NAME)

CM 1

CRM 108-05-4

CMF C4 H6 O2



IC ICM D21H019-38

ICS B41M005-00; C08J007-04

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 42

IT 2118-39-0, C.I. Food Black 2 6441-93-6, C.I. Acid Red 35

6473-33-2, C.I. Direct Blue 35 50925-42-3, C.I. Direct Yellow 86

RL: TEM (Technical or engineered material use); USES (Uses)

(dyes; water-resistant recording substrates coated with alumina
hydrate and anionic resin emulsions with improved ink
absorption for water-based jet-printing inks)

IT 9003-20-7D, Poly(vinyl acetate), anionic 186844-39-3,
Saivinol AS 550

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(water-resistant recording substrates coated with alumina
hydrate and anionic resin emulsions with improved ink
absorption for water-based jet-printing inks)

L89 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:246661 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 122:8169

ORIGINAL REFERENCE NO.: 122:1895a,1898a

TITLE: Extraction of polyhydroxyalkanoates
from halophilic bacteria

INVENTOR(S): Munoz Escalona, Antonio; Rodriguez Varela,
Francisco; Marcilla Gomis, Antonio

PATENT ASSIGNEE(S): Repsol Quimica S. A., Spain

10/579,805-270119-EIC 1700 SEARCH

SOURCE: Eur. Pat. Appl., 6 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 622462	A1	19941102	EP 1994-500077	1994 0429
EP 622462	B1	20010829	<--	
R: AT, DE, FR, GB	GB			
ES 2062955	A1	19941216	ES 1993-914	1993 0429
ES 2062955	B1	19950616	<--	
US 5536419	A	19960716	US 1994-234325	1994 0428
AT 204907	T	20010915	AT 1994-500077	1994 0429
JP 07303490	A	19951121	JP 1994-99777	1994 0513
JP 2726802	B2	19980311	<--	
PRIORITY APPLN. INFO.:			ES 1993-914	A 1993 0429
			<--	

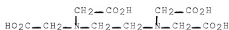
ED Entered STN: 15 Dec 1994

AB A procedure is disclosed for the extraction of polyhydroxyalkanoates from halophilic bacteria, using lysis or rupture of halophilic cells (for example, of halobacteria) which develop in media with high salt concns., by concentration by centrifugation, and then dilution-resuspension in a medium with low salt concentration, for example, fresh or distilled water, and then centrifugation, sedimentation, or filtration of the suspension obtained.

IT 60-00-4, EDTA, biological studies 81-24-3,
 Taurocholic acid 302-95-4, Sodium deoxycholate
 361-09-1, Sodium cholate
 RL: BUU (Biological use, unclassified); BIOL (Biological study);
 USES (Uses)
 (extraction of polyhydroxyalkanoates from halophilic bacteria)

RN 60-00-4 HCAPLUS

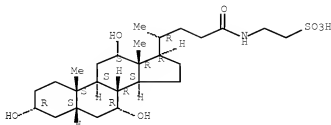
CN Glycine, N,N'-1,2-ethanediybis[N-(carboxymethyl)- (CA INDEX NAME)]



RN 81-24-3 HCAPLUS

CN Ethanesulfonic acid, 2-[[(3 α , 5 β , 7 α , 12 α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]- (CA INDEX NAME)

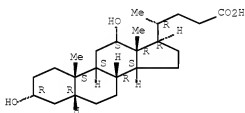
Absolute stereochemistry.



RN 302-95-4 HCAPLUS

CN Cholan-24-oic acid, 3,12-dihydroxy-, monosodium salt,
(3 α ,5 β ,12 α)- (CA INDEX NAME)

Absolute stereochemistry.

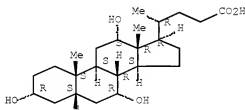


● Na

RN 361-09-1 HCAPLUS

CN Cholan-24-oic acid, 3,7,12-trihydroxy-, sodium salt (1:1),
(3 α ,5 β ,7 α ,12 α)- (CA INDEX NAME)

Absolute stereochemistry.



● Na

IC ICM C12P007-62

ICS C12N001-06

CC 16-4 (Fermentation and Bioindustrial Chemistry)

polyhydroxyalkanoate extn halophilic bacteria

IT Haloferax mediterranei

(extraction of polyhydroxyalkanoates from halophilic
bacteria)

IT Bacteria
(halophilic, extraction of polyhydroxyalkanoates from
halophilic bacteria)

IT Polyesters, preparation
RL: BMF (Bioindustrial manufacture); PUR (Purification or
recovery); BIOL (Biological study); PREP (Preparation)
(hydroxycarboxylic acid-based, extraction of
polyhydroxyalkanoates from halophilic bacteria)

IT 60-00-4, EDTA, biological studies 81-24-3,
Taurocholic acid 98-11-3D, Benzenesulfonic acid, alkyl derivs.
151-21-3, Sodium laurylsulfate, biological studies
702-95-4, Sodium deoxycholate 361-09-1, Sodium
cholate 550-97-0, Alphenol 25154-52-3, Nonylphenol
RL: BUU (Biological use, unclassified); BIOL (Biological study);
USES (Uses)
(extraction of polyhydroxyalkanoates from halophilic
bacteria)

L89 ANSWER 13 OF 16 HCAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 1994:455877 HCAPLUS Full-text

DOCUMENT NUMBER: 121:55877

ORIGINAL REFERENCE NO.: 121:10075a,10078a

TITLE:
Inhibition of immunoglobulin production in
human Namalwa cells and rat spleen lymphocytes
by bile acid

AUTHOR(S): Lim, Beong Ou; Yamada, Koji; Sugano, Michihiro

CORPORATE SOURCE: Fac. Agric., Kyushu Univ., Fukuoka, 812, Japan

SOURCE: Bioscience, Biotechnology, and Biochemistry (

1994), 58(6), 1107-11

CODEN: BBBIEJ; ISSN: 0916-8451

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 06 Aug 1994

AB The effects of bile acids on the proliferation and IgM production of human
lymphoblastoid Namalwa cells and on the Ig production of rat spleen lymphocytes were
examined. Among the free bile acids examined, two dihydroxy bile acids, CDCA and DCA,
inhibited the proliferation of Namalwa cells and Ig production by rat spleen
lymphocytes at concns. above 20 µg/mL, while the inhibitory effect of a trihydroxy bile
acid, CA, was much weaker. The inhibitory effects of their conjugated bile acids were
weaker than those of the free ones, and the DCA derivs. were more toxic than the CA
ones. These results suggest that dihydroxy bile acids were more toxic to Ig production
by spleen lymphocytes than trihydroxy ones. The effect of bile acids on Ig production
by the lymphocytes was examined in the presence of such mitogens as LPS, PMA, Con A,
and PWM. As a result, TDCA inhibited their IgG and IgM production at 200 µg/mL
independently of the mitogen addition, while TCA was almost ineffective. It thus seems
likely that the bile acid inhibits the Ig production by spleen lymphocytes through non-
specific inhibition of the both T and B cell functions.

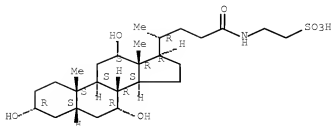
IT 81-24-3, Taurocholic acid 83-44-3, Deoxycholic
acid 360-65-6, Glycodeoxycholic acid 474-25-9,
Chenodeoxycholic acid 475-31-0, Glycocholic acid
516-50-7, Taurodeoxycholic acid
RL: BIOL (Biological study)

(Ig formation by B-cells inhibition by)

RN 81-24-3 HCAPLUS

CN Ethanesulfonic acid, 2-[[[(3α,5β,7α,12α)-
3,7,12-trihydroxy-24-oxocholan-24-yl]amino]- (CA INDEX NAME)

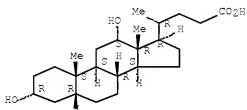
Absolute stereochemistry.



RN 83-44-3 HCAPLUS

CN Cholan-24-oic acid, 3,12-dihydroxy-, (3 α ,5 β ,12 α)-
(CA INDEX NAME)

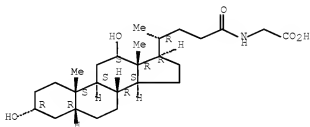
Absolute stereochemistry.



RN 360-65-6 HCAPLUS

CN Glycine, N-[(3 α ,5 β ,12 α)-3,12-dihydroxy-24-oxocholan-24-yl]-
(CA INDEX NAME)

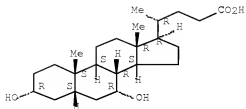
Absolute stereochemistry.



RN 474-25-9 HCAPLUS

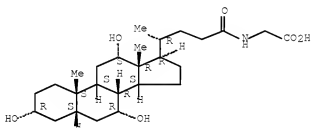
CN Cholan-24-oic acid, 3,7-dihydroxy-, (3 α ,5 β ,7 α)-
(CA INDEX NAME)

Absolute stereochemistry.



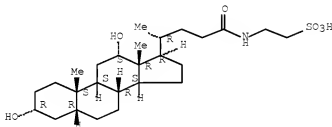
RN 475-31-0 HCAPLUS
 CN Glycine, N-[(3 α ,5 β ,7 α ,12 α)-3,7,12-trihydroxy-24-oxocholelan-24-yl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 516-50-7 HCAPLUS
 CN Ethanesulfonic acid, 2-[[[(3 α ,5 β ,12 α)-3,12-dihydroxy-24-oxocholelan-24-yl]amino]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

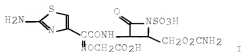


CC 15-10 (Immunochemistry)
 IT 81-24-3, Taurocholic acid 82-44-3, Deoxycholic acid 560-65-6, Glycodeoxycholic acid 474-25-9, Chenodeoxycholic acid 475-31-0, Glycocholic acid 516-50-7, Taurodeoxycholic acid
 RL: BIOL (Biological study)
 (Ig formation by B-cells inhibition by)

L89 ANSWER 14 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1987:432652 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 107:32652
 ORIGINAL REFERENCE NO.: 107:5307a,5310a
 TITLE: Immunogenicity of carumonam

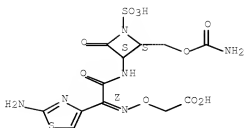
10/579,805-270119-EIC 1700 SEARCH

AUTHOR(S): Arakawa, Mutsushi; Nakai, Yoichi; Inoue, Sadamu; Kanamaru, Kazue
 CORPORATE SOURCE: Cent. Res. Div., Takeda Chem. Ind., Ltd., Japan
 SOURCE: Yakuri to Chiryo (1973-2000) (1986), 14(6), 3869-85
 CODEN: YACHDS; ISSN: 0386-3603
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese
 ED Entered STN: 08 Aug 1987
 GI



- AB The immunol. properties of carumonam (I), a new N-sulfo- β -lactam antibiotic, were examined. Active systemic anaphylaxis was not elicited with carumonam, aztreonam (AZT), cefoperazone (CPZ), or ampicillin (ABPC) in guinea pigs immunized with an emulsion of the antibiotics or antibiotic-ovalbumin (OVA) conjugates and Freund's complete adjuvant (FCA). Passive hemagglutination (PHA), guinea pig 24-h passive cutaneous anaphylaxis (PCA), and rat 24-h PCA indicated the production of hapten specific antibodies in mice immunized with the emulsion of carumonam, AZT, or ABPC and FCA. Antibody production with carumonam and AZT was less than with ABPC. A specific antibody was not detected with CPZ. An antibody was not detected in rabbits immunized with a solution of carumonam by means of the PHA and guinea pig 24-h PCA, although weak PHA antibodies were produced with a solution of ABPC. Immunization of rabbits with an emulsion of carumonam and FCA produced antibodies as well as that of AZT, CPZ, or ABPC and FCA. The immunol. cross-reactivities of carumonam with AZT, ceftazidime (CAZ), cefmenoxime (CMX), cefsulodin (CFS), CPZ, cefazolin (CEZ), and ABPC were studied in mice immunized with an emulsion of the antibiotic-OVA conjugates and FCA. The PHA, PCA, and agar gel precipitin reaction and the hapten inhibition of the PCA showed that anti-carumonam-OVA, anti-AZT-OVA, and anti-CAZ-OVA sera cross-reacted with carumonam-HSA, AZT-HSA, and CAZ-HSA. In addition anti-CAZ-OVA serum slightly reacted with CMX-HSA. Carumonam covalently bound to HSA in the physiol. pH range to the same degree as CAZ and ABPC, but CPZ bound less. The in vitro direct Coomb's reaction of carumonam and AZT was neg. The reaction of CAZ, CMX, CFS, CEZ, ABPC, and cephalothin was, however, pos. Apparently the immunogenicity of carumonam is of the same degree as that of AZT but weaker than that of ABPC, and the immunol. cross-reactivity depends on the similarity of the side chain at the 3-position of monocyclic- β -lactam antibiotics or 7-position of cephalosporins.
- IT 87638-04-8, Carumonam
 RL: BIOL (Biological study)
 (immunogenicity of)
- RN 87638-04-8 HCAPLUS
- CN Acetic acid, 2-[[[(2S)-[2-[[[(2S,3S)-2-[[[(aminocarbonyloxy)methyl]-4-oxo-1-sulfo-3-azetidinyl]amino]-1-(2-amino-4-thiazolyl)-2-oxoethylidene]amino]oxy]- (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



CC 1-5 (Pharmacology)
 IT 37638-04-E, Carumonam
 RL: BIOL (Biological study)
 (immunogenicity of)

=> d 189 15-16 ibib ab hit ind

L89 ANSWER 15 OF 16 DRUGU COPYRIGHT 2008 THOMSON REUTERS ON STN
 ACCESSION NUMBER: 2000-31689 DRUGU M Full-text
 TITLE: Modification of acquired immunity in BALB/c mice by
 aztreonam.
 AUTHOR: Ortega E; de Pablo M A; Gaforio J J; Gallego A M;
 Alvarez C; Ruiz Bravo A; de Cienfuegos G A
 CORPORATE SOURCE: Univ.Jaen; Univ.Granada
 LOCATION: Jaen; Granada, Esp.
 SOURCE: Int.J.Antimicrob.Agents (15, No. 3, 193-99, 2000) 5
 Tab. 23 Ref.

CODEN: IAAGE ISSN: 0924-8579
 AVAIL. OF DOC.: Department of Health Sciences, Faculty of
 Experimental Sciences, University of Jaen, Paraje Las
 Lagunillas S/N, 23071 Jaen, Spain. (e-mail:
 eortega@ujaen.es).
 LANGUAGE: English
 DOCUMENT TYPE: Journal
 FIELD AVAIL.: AB; LA; CT
 FILE SEGMENT: Literature

AB I.p. aztreonam (AZ, Squibb) enhanced splenocyte responses to specific mitogens in a study of mice. T- and B-lymphocyte proliferation increased after exposure to concanavalin A (Con A) or phytohemagglutinin (PHA). Although the splenic index increased, production of IgM and IgG decreased after prolonged treatment. IL-2 production by splenic lymphocytes was enhanced by the highest dosage or by prolonged treatment. Further studies are necessary to see if the immunomodulatory effects of AZ treatments are clinically relevant in human medicine.

PY 2000

AB I.p. aztreonam (AZ, Squibb) enhanced splenocyte responses to specific mitogens in a study of mice. T- and B-lymphocyte proliferation increased after exposure to concanavalin A (Con A) or phytohemagglutinin (PHA). Although the splenic index increased, production of IgM and IgG decreased after prolonged treatment. IL-2 production by splenic lymphocytes was enhanced by the highest dosage or by prolonged treatment. Further studies are necessary to see if the immunomodulatory effects of AZ treatments are clinically relevant in human medicine.

ABEX Methods BALB/c mice received 57, 28, 14 or 7 mg AZ/kg/day for 7-days or 28 mg/kg/day for 14-days. Results When Con A or PHA was used as a T-cell specific mitogen, prior treatment with high doses of AZ (57 mg/kg/day for 7 days) enhanced the resulting lymphocyte response to PHA. When AZ was given at a dosage of 28 mg/kg/day for 14 days, lymphocyte proliferation was increased in response to Con A and PHA. Both high dose AZ therapy and prolonged AZ therapy induced an increase in B-cell proliferation. There was an increase in splenic index after the prolonged treatment. When mice were injected with AZ at a dosage of 57 mg/kg/day for 7 days or 28

10/579,805-270119-EIC 1700 SEARCH

mg/kg/day for 14 days, a decrease in the production of IgM and IgG by splenic cells was detected. After high dose or prolonged AZ therapy the production of IL-2 by splenic lymphocytes was enhanced. When mice received very high AZ doses, total cell counts decreased. Similarly, the percentage of monocytes was reduced in this treatment group. (LRT/NS)

RN [01] 78110-38-0
 AN 2000-31689 DRUGU M Full-text
 M Microbiology
 6 Antibiotics
 20 Immunological
 50 Biological Response Modifiers
 CT [01] AZTREONAM *PH; SQUIBB *FT; CONCANAVALIN-A *RC;
 PHYTOHEMAGGLUTININ *RC; AZTREONAM *RN; I.P. *FT; IN-VIVO *FT;
 MOUSE *FT; SPLEEN-CELL *FT; FUNCTION *FT; LYMPHOCYTE *FT;
 IMMUNE-RESPONSE *FT; IGM *FT; IGG *FT; INTERLEUKIN-2 *FT;
 IMMUNOMODULATOR *FT; HIGH *FT; DOSAGE *FT; INJECTION *FT;
 LAB.ANIMAL *FT; LYMPHOCYTE *FT; IMMUNITY *FT; IMMUNOGLOBULIN
 *FT; IMMUNOGLOBULIN *FT; ANTIBIOTICS *FT; PH *FT
 RN: 78110-38-0

L89 ANSWER 16 OF 16 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 1989061089 EMBASE Full-text
 TITLE: Low dosage treatment with propiono-hydroxamic acid in paraplegic patients.
 AUTHOR: Tizzani, A.; Carone, R.; Casetta, G.; Piana, P.; Vercelli, D.
 CORPORATE SOURCE: Institute of Nephrourology, University of Turin, I-10126 Torino, Italy.
 SOURCE: European Urology, (1989) Vol. 16, No. 1, pp. 36-40.
 ISSN: 0302-2838 CODEN: EUURAV
 COUNTRY: Switzerland
 DOCUMENT TYPE: Journal; Article
 FILE SEGMENT: 028 Urology and Nephrology
 037 Drug Literature Index
 004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
 008 Neurology and Neurosurgery
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 ENTRY DATE: Entered STN: 12 Dec 1991
 Last Updated on STN: 12 Dec 1991

AB Severe urinary tract infections due to urease-producing bacteria are frequently associated with neurolurlogic pathologies and complicated by infected nephrolithiasis. Hydroxamic acids, acting as urease inhibitors, can effectively reduce lithiasic risk, normalizing the urinary environment, as well as enhancing the action of antibiotic treatments. A low dosage propiono-hydroxamic acid (PHA) treatment, 60 mg twice a day for 7 days and then 60 mg/day, was used in 15 patients affected with neurologic pathologies for 3 months. Nine patients were stone-free and 6 stone-bearers. Urinary pH and ammonium decreased in both groups. Halving the PHA dose did not cause any variation in urinary pH or ammonium trends. In the stone-bearing group an increase in these parameters was correlated with urinary infection recurrences. Complete sterilization was achieved in 11 of 14 patients who completed the trial. In stone-free group no patient had an infectious recurrence after the first month. Two patients in the stone-bearing group had repeated recurrences. One patient dropped out after 45 days due to a decrease in platelets. The efficacy of such low dose treatment makes even long-term or repeated therapies possible, as is often needed by neurolurlogic patients.
 SO European Urology, (1989) Vol. 16, No. 1, pp. 36-40.
 ISSN: 0302-2838 CODEN: EUURAV
 AB Severe urinary tract infections due to urease-producing bacteria are frequently associated with neurolurlogic pathologies and complicated by infected nephrolithiasis. Hydroxamic acids, acting as urease inhibitors, can effectively reduce lithiasic risk, normalizing the urinary environment, as well as enhancing the action of antibiotic treatments. A low dosage propiono-hydroxamic acid (PHA) treatment, 60 mg twice a day for 7 days and then 60 mg/day, was used in 15 patients affected with neurologic

10/579,805-270119-EIC 1700 SEARCH

pathologies for 3 months. Nine patients were stone-free and 6 stone-bearers. Urinary pH and ammonium decreased in both groups. Halving the PHA dose did not cause any variation in urinary pH or ammonium trends. In the stone-bearing group an increase in these parameters was correlated with urinary infection recurrences. Complete sterilization was achieved in 11 of 14 patients who completed the trial. In stone-free group no patient had an infectious recurrence after the first month. Two patients in the stone-bearing group had repeated recurrences. One patient dropped out after 45 days due to a decrease in platelets. The efficacy of such low dose treatment makes even long-term or repeated therapies possible, as is often needed by neurourologic patients.

RN (amikacin) 37517-28-5, 39831-55-5; (ammonia) 14798-03-9,
51847-23-5, 7664-41-7; (aztreonam) 78110-38-0;
(kanamycin) 11025-66-4, 61230-38-4, 8063-07-8; (norfloxacin)
70458-96-7; (pipemidic acid) 51940-44-4; (propionohydroxamic acid)
2580-63-4; (urease) 9002-13-5

CT Medical Descriptors:
clinical article
female
human
male
*nephrolithiasis
oral drug administration
*paraplegia
priority journal
*urinary tract infection: PC, prevention
urine pH

CT Drug Descriptors:
amikacin
*ammonia
aztreonam
*hydroxamic acid: DO, drug dose
*hydroxamic acid: DT, drug therapy
kanamycin
norfloxacin
pipemidic acid
*propionohydroxamic acid: DO, drug dose
*propionohydroxamic acid: DT, drug therapy
*urease

RN (amikacin) 37517-28-5, 39831-55-5; (ammonia) 14798-03-9,
51847-23-5, 7664-41-7; (aztreonam) 78110-38-0;
(kanamycin) 11025-66-4, 61230-38-4, 8063-07-8; (norfloxacin)
70458-96-7; (pipemidic acid) 51940-44-4; (propionohydroxamic acid)
2580-63-4; (urease) 9002-13-5

FULL SEARCH HISTORY

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(FILE 'HOME' ENTERED AT 14:44:45 ON 02 SEP 2008)

FILE 'HCAPLUS' ENTERED AT 14:45:11 ON 02 SEP 2008

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D ALL
SEL RN

FILE 'REGISTRY' ENTERED AT 14:46:04 ON 02 SEP 2008

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OR 31759-58-7/BI OR 340255-66-5/BI OR 483343-37-9/BI
OR 483343-40-4/BI OR 591251-65-9/BI OR 591251-79-5/BI
OR 107-35-7/BI OR 121-57-3/BI OR 13244-33-2/BI OR
14660-52-7/BI OR 25542-62-5/BI OR 2969-81-5/BI OR
29823-21-0/BI OR 3395-91-3/BI OR 40307-20-8/BI OR
501-53-1/BI OR 5437-45-6/BI OR 54545-52-7/BI OR
67-56-1/BI OR 68227-69-0/BI OR 81-16-3/BI OR 82-75-7/BI
OR 86311-35-5/BI OR 88-21-1/BI OR 88-44-8/BI)
D SCAN

FILE 'LREGISTRY' ENTERED AT 14:47:11 ON 02 SEP 2008

FILE 'REGISTRY' ENTERED AT 14:47:55 ON 02 SEP 2008

E SACCHARIDE/CN

E SACCHARI/CN

E 34

E SACCHARI/CN

FILE 'STNGUIDE' ENTERED AT 14:50:19 ON 02 SEP 2008

FILE 'REGISTRY' ENTERED AT 14:51:08 ON 02 SEP 2008

E SACCHARI/CN

E SACCHARI/CN 25

FILE 'STNGUIDE' ENTERED AT 14:52:32 ON 02 SEP 2008

FILE 'LREGISTRY' ENTERED AT 14:54:05 ON 02 SEP 2008

L3 STR

FILE 'REGISTRY' ENTERED AT 15:08:53 ON 02 SEP 2008

L4 44 SEA SSS SAM L3

FILE 'STNGUIDE' ENTERED AT 15:09:10 ON 02 SEP 2008

FILE 'REGISTRY' ENTERED AT 15:13:16 ON 02 SEP 2008

L5 SCR 1312 OR 1526

L6 43 SEA SSS SAM L3 AND L5

FILE 'HCAPLUS' ENTERED AT 15:14:00 ON 02 SEP 2008

D QUE

FILE 'LREGISTRY' ENTERED AT 15:14:25 ON 02 SEP 2008

L7 STR L3

FILE 'REGISTRY' ENTERED AT 15:18:25 ON 02 SEP 2008

L8 28 SEA SSS SAM L7

L9 27 SEA SSS SAM L7 AND L5

FILE 'HCAPLUS' ENTERED AT 15:19:03 ON 02 SEP 2008

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ALKANOIC? OR (POLY OR ?POLYM?) (A) (HYDROXYALKANOAT? OR
HYDROXYALKANOIC? OR (HYDROXY(W) (ALKANOAT? OR ALKANOIC?

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    ))) OR PHA
L11      14281 SEA ABB=ON PLU=ON POLYHYDROXYALKANOAT? OR POLYHYDROXY
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FILE 'HCAPLUS' ENTERED AT 15:19:49 ON 02 SEP 2008
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FILE 'LREGISTRY' ENTERED AT 15:26:35 ON 02 SEP 2008
L15      STR L7
L16      STR L15

FILE 'REGISTRY' ENTERED AT 15:30:24 ON 02 SEP 2008
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L17      50 SEA SUB=L13 SSS SAM L15
L18      4273 SEA SUB=L13 SSS FUL L15
        D SAV
        SAV TEMP L18 FAN805REGB/A
        ACT FAN805REG/A
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L19 (    14281)SEA ABB=ON PLU=ON POLYHYDROXYALKANOAT? OR POLYHYDROXY
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L21 (    37020)SEA ABB=ON PLU=ON L20
L22      STR
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        D QUE STAT
        D SAV
        ACT FAN805REGA/A
        -----
L24      STR
L25 (    214330)SEA ABB=ON PLU=ON POLYESTER/FCT
L26      541 SEA SUB=L25 SSS FUL L24
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L27      2 SEA ABB=ON PLU=ON L23 AND L18
        D SCAN
L28      0 SEA ABB=ON PLU=ON L18 AND L26
        D QUE
        D SAV
        D QUE STAT L26
        D QUE STAT L23

FILE 'LREGISTRY' ENTERED AT 15:39:58 ON 02 SEP 2008
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FILE 'REGISTRY' ENTERED AT 15:42:08 ON 02 SEP 2008
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L31      SCR 1796
L32      50 SEA SSS SAM L29 AND L31
        ACT FAN001REG/A
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FILE 'LREGISTRY' ENTERED AT 15:53:43 ON 02 SEP 2008
L33      STR L24

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10/579,805-270119-EIC 1700 SEARCH

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FILE 'REGISTRY' ENTERED AT 15:56:17 ON 02 SEP 2008
L34      1 SEA SSS SAM L33 AND L31
          D SCAN
          D QUE STAT L32
L35      50 SEA SSS SAM L29 AND L31
L36      21198 SEA SSS FUL L29 AND L31
          D SAV
          SAV TEMP L36 FAN805REGC/A
L37      0 SEA ABB=ON PLU=ON L36 AND L18

FILE 'HCAPLUS' ENTERED AT 15:58:33 ON 02 SEP 2008
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L39      3551 SEA ABB=ON PLU=ON L38 AND L19

FILE 'REGISTRY' ENTERED AT 15:59:31 ON 02 SEP 2008

FILE 'HCAPLUS' ENTERED AT 16:00:16 ON 02 SEP 2008
L40      12650 SEA ABB=ON PLU=ON L23
L41      172 SEA ABB=ON PLU=ON L26
L42      12810 SEA ABB=ON PLU=ON L40 OR L41
L43      8892 SEA ABB=ON PLU=ON L42 AND L38
L44      17 SEA ABB=ON PLU=ON L43 AND L19
          D SCAN
          D QUE
L45      3379 SEA ABB=ON PLU=ON L27
L46      2 SEA ABB=ON PLU=ON L45 AND L19
          D SCAN
L47      23675 SEA ABB=ON PLU=ON L36
L48      16 SEA ABB=ON PLU=ON L47 AND L19
          D QUE L33

FILE 'REGISTRY' ENTERED AT 16:05:28 ON 02 SEP 2008
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          D SCAN
L50      14 SEA SUB=L36 SSS FUL L33
          D SCAN
          SAV TEMP L50 FAN805REGD/A
          D QUE
L51      0 SEA ABB=ON PLU=ON L50 AND L18

FILE 'HCAPLUS' ENTERED AT 16:07:31 ON 02 SEP 2008
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L53      0 SEA ABB=ON PLU=ON L52 AND L38
L54      0 SEA ABB=ON PLU=ON L52 AND L19
L55      18 SEA ABB=ON PLU=ON L44 OR L46 OR L48 OR L53 OR L54
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L56      QUE ABB=ON PLU=ON POLYHYDROXYALKANOAT? OR POLYHYDROXY
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L57 (    14281)SEA ABB=ON PLU=ON POLYHYDROXYALKANOAT? OR POLYHYDROXY
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L59 (    37020)SEA ABB=ON PLU=ON L58
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L61      STR
L62 (    17)SEA SUB=L59 SSS FUL L61
L63 (    12650)SEA ABB=ON PLU=ON L62
L64 (    18)SEA ABB=ON PLU=ON L56 AND L63
L65      QUE ABB=ON PLU=ON PY<2005 OR PRY<2005 OR AY<2005 OR
          MY<2005 OR REVIEW/DT
L66 (    14)SEA ABB=ON PLU=ON L64 AND L65

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10/579,805-270119-EIC 1700 SEARCH

L67 (214330)SEA ABB=ON PLU=ON POLYESTER/PCT
 L68 (541)SEA SUB=L67 SSS FUL L61
 L69 (0)SEA SUB=L68 SSS FUL L60
 L70 (541)SEA ABB=ON PLU=ON L68 OR L69
 L71 (172)SEA ABB=ON PLU=ON L70
 L72 (0)SEA ABB=ON PLU=ON L71 AND L56
 L73 14 SEA ABB=ON PLU=ON L72 OR L66

 D QUE

L74 14 SEA ABB=ON PLU=ON L55 AND L65
 L75 14 SEA ABB=ON PLU=ON L73 OR L74
 SAV TEMP L75 FAN805HCPB/A
 D SAV

FILE 'MEDLINE, BIOSIS, DRUGU, EMBASE' ENTERED AT 16:13:22 ON 02
 SEP 2008

ACT FAN805MULTA/A

L76 QUE ABB=ON PLU=ON POLYHYDROXYALKANOAT? OR POLYHYDROXY
 ALKANOIC? OR (POLY OR ?POLYM?) (A) (HYDROXYALKANOAT? OR
 HYDROXYALKANOIC? OR (HYDROXY(W) (ALKANOAT? OR ALKANOIC?
))) OR PHA

L77 SEL PLU=ON L77 1- RN : 37021 TERMS
 L78 STR
 L79 STR

L80 (17)SEA SUB=L78 SSS FUL L79
 L81 QUE ABB=ON PLU=ON PY<2005 OR PRY<2005 OR AY<2005 OR
 MY<2005 OR REVIEW/DT

L82 (24834)SEA ABB=ON PLU=ON L80
 L83 (4)SEA ABB=ON PLU=ON L82 AND L76
 L84 (4)SEA ABB=ON PLU=ON L83 AND L81
 L85 (541)SEA FILE=REGISTRY SUB=L85 SSS FUL L79
 L86 (0)SEA FILE=REGISTRY SUB=L85 SSS FUL L78
 L87 (0)SEA L87
 L88 4 SEA ABB=ON PLU=ON L87 OR L84

FILE 'STINGUIDE' ENTERED AT 16:13:56 ON 02 SEP 2008
 D QUE L75
 D QUE L88

FILE 'HCAPLUS, DRUGU, EMBASE' ENTERED AT 16:15:16 ON 02 SEP 2008

L89 16 DUP REM L75 L88 (2 DUPLICATES REMOVED)
 ANSWERS '1-14' FROM FILE HCAPLUS
 ANSWER '15' FROM FILE DRUGU
 ANSWER '16' FROM FILE EMBASE
 D L89 1-14 IBIB ED ABS HITSTR HITIND
 D L89 15-16 IBIB AB HIT IND